

Poul Anderson

# THE BOOK OF VAN RIJN

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## PLANETS AND PROFITS:

*Introducing Nicholas Van Rijn and the Polesotechnic League...*

...AND ALSO INTRODUCING one of the grandest sagas in science fiction: the Technic Civilization series. It begins in the not-distant future, with humans still locked in the Solar System and recovering from a hinted-at time of chaos (which might be our own present day), voyaging outward to explore the moons of Saturn. It ends over five thousand years later, with human civilization, now sprawling across a vast span of the galaxy, recovering from another, much longer time of chaos—the Long Night which followed the fall of the Terran Empire.

The writing of the saga and its appearances in print spanned a time far shorter, but still unusually long in the field, beginning with the novelet "Tiger by the Tail," published in the January 1951 issue of that grand old pulp *Planet Stories*, and ending with the novel *The Game of Empire*, published in 1985. However, those two yarns do not mark the end points of the series, the stories comprising which were written very much out of sequence. Both fall late in the timeline, being episodes in the flamboyant career of Captain Sir Dominic Flandry, who'll make his swashbuckling appearance in volume four of the Technic Civilization series. (Be patient, please—after all, Flandry won't be born until about 570 years after the last story in this first volume.)

If this book's title doesn't make it obvious, the main player in the book you're holding in your hands is the blustering, vulgar and bigger than life (both literally and figuratively) human volcano named Nicholas van Rijn (rhymes with "fine"), a merchant prince in the star-spanning Poulosotechnic, pardon me, Polesotechnic League, a loose-knit organization of interstellar traders. That authoritative expert on Poul Anderson's writings, Sandra Miesel, writes that the word "Polesotechnic" was coined by Poul's wife Karen Anderson from the Greek for "selling skills." By that meaning, van Rijn is beyond doubt the most polesotechnical of the polesotechnicians.

On van Rijn, Poul Anderson wrote, "While some readers couldn't stand this burly, beery, uninhibited merchant prince, on the whole he was probably the most popular character I ever hit upon, and the stories about him enjoyed a long and lusty run." Van Rijn's first appearance in the saga (and in this book) was the novelet "Margin of Profit," published in the September 1956 issue of *Astounding Science Fiction*, though the version of "Margin of Profit" in these pages is the one which Anderson rewrote for the 1978 collection, *The Earth Book of Stormgate*, to give Nick more of his inimitable mannerisms than he had displayed in his debut appearance, and also to eliminate a few discrepancies with the Technic Civilization universe as it later developed. (More about that later.)

"Two meters in height and more than broad enough to match," van Rijn is described on his first appearance, and he may remind the reader of Falstaff, but Nick's no mere braggart, no empty suit—he makes good on his brags and delivers the goods. Poul Anderson once mentioned Long John Silver as another influence on his creation of van Rijn, and *that* charismatic scoundrel was certainly no empty suit (ahrrrr!). Van Rijn unravels mysteries and solves problems as well as any sf hero of old, without benefit of the heretofore obligatory square jaw, steely gaze and laconic dialogue of the classic pulp hero. Still, there's muscle under the fat, augmented by quick reflexes, as enemies (and occasionally, his employees) have been chagrined to learn. He's a capitalist hero, too, always thinking of making a buck (or a credit), even in desperate situations, who'd rather sell things to his enemies than fight them. He started out dirt poor and built his Solar Spice & Liquors Company up from a shoestring. Move over, John Galt.

He's no ascetic either, and never misses a chance to enjoy good food, good booze, and a good smoke, usually with Mozart playing in the background. He appreciates the ladies, too, and while financial considerations are often involved, this is not always the case. He also appreciates art and classic literature, though the latter doesn't seem to have helped his malaprop-prone speech, full of twisted turns of phrase. Someday, somebody might imitate Heinlein's *The Notebooks of Lazarus Long* and do a short book of classic van Rijnisms, such as:

*"I have no fine university degrees, I learned in the school of hard knockers."*

*"I make no skeletons about it..."*

*"Put that in your pipe and stick it!"*

*"This is the times that fry men's souls."*

And there's more where *those* came from...

Van Rijn's ongoing war with the King's Anglic notwithstanding, he did play the silver-tongued orator on one memorable occasion, in the full-length novel included in this volume, *The Man Who Counts*, when he had to convince squabbling factions of the winged Diomedean to unite against the common enemy. A lesser writer than Poul Anderson would have attempted to compose a stirring speech for his hero and brought forth a clunker that's dead both on the page and on arrival. A good, but less ingenious writer would have composed a stirring speech that was actually *stirring*. Poul Anderson, being both very good and very ingenious, did something entirely different. And I won't spoil anyone's first encounter with that part of the novel by giving it away here.

Also on stage is one of van Rijn's employees, David Falkayn, first seen as an ambitious young man trying to make his mark, and not sure he'll succeed, or even survive. You may think that I'm not giving him his due in this introduction, but the scales will be balanced in the next volume, where he plays a larger role (as indicated by the title of the second Technic Civilization book, *David Falkayn: Star Trader*, reserve your copy now). Further, Falkayn is

going to become part of a trader team, one member of which, Adzel the dragonlike Buddhist, you'll encounter briefly in one of the stories herein, but you'll have to wait for volume two to meet Chee Lan, the third member of the team. And this team is very much more than the sum of its parts.

I'll also mention that Falkayn's influence on the course of human history arguably is even greater than that of van Rijn (more on that in future volumes). In any case, it's obvious that Falkayn, like his creator, is a fan of Leslie Charteris, and how could I slight a fellow acolyte of the Saintly chronicles?

And now, the master chef... Poul Anderson was one of the most prolific writers in science fiction and fantasy, and possibly the *most* prolific. His bibliography has something like seventy sf or fantasy novels and over forty story collections published, drawn from his hundreds of sf and fantasy short stories. While he wrote in many fields—historical fiction, mysteries, horror fiction, nonfiction books and essays, and poetry—the realms of science fiction and fantasy were his true home, and there he was one of the best. I doubt that any sf writer who might come close to matching him for quantity could show such a consistently high quality of work.

He was also a writer who got the science right, which was no surprise since he had a degree in physics, and had a lifelong passion for all the hard sciences. Before he set a story on a planet, he would do research and calculations to come up with a world that wasn't just a cardboard backdrop—Diomedes in *The Man Who Counts* is a prime example, and he gave a solid scientific explanation how the winged natives can fly there, when they would be too heavy to fly on Earth. He got more than science right, too. The brief introduction to "The Three-Cornered Wheel" quotes Sturgeon's Revelation ("ninety percent of *everything* is crud"). It happens that Sturgeon's Revelation is usually and wrongly named as Sturgeon's *Law*, but when Sturgeon formulated it in his book review column for *Venture* in the late 1950s, he called it Sturgeon's *Revelation*. And Anderson gets the name right, to my appreciative applause. (If you'll pardon a digression, Sturgeon himself complained about people miscalling his Revelation as his Law, and noted that he already had a Sturgeon's Law, first stated in the story "The Claustrophile" in a 1956 *Galaxy*, usually rendered as "nothing is always absolutely so.")

But Anderson's getting the science right didn't preclude having prose that is always fluent and often sings, perhaps emulating the Scandinavian sagas which he knew by heart. For example, in "Esau": *...a range of ice mountains flashed blindingly; Suleiman's twelve-hour day was drawing to a close and Osman's rays struck level through a break in roiling ruddy cloud cover. Elsewhere a storm lifted like a dark wall on which lightning scribbled. The dense air brought its thunder-noise to Dalmady as a high drumroll.*

Larry Niven once described Anderson as "a poet who happens to write science fiction." Just so, though critics have rarely included Anderson with other notable stylists such as Sturgeon or Bradbury.

It's not surprising that Anderson won seven Hugo Awards and three Nebula Awards ("The Saturn Game," the first story in this book, took home one of each), as well as a Gandalf Grand Master award, a John W. Campbell Memorial Award, and four Prometheus Awards (including the Lifetime Achievement Prometheus Award). Speaking of lifetime achievement, he also received the Grand Master Award for that very thing from the Science Fiction and Fantasy Writers of America. Nor was it remarkable that when *Locus* in the 1970s did a poll of its readers for Best All-Time SF Writer, he nailed the fifth spot from the top. If anything, it's surprising that he didn't have a much longer shelf full of honors and rank even higher in that poll. Likely, Anderson wrote too much, too well, and made it look far too easy to stand out among the flashier scribes.

Eric Flint, comparing Anderson to Joe DiMaggio, "who," as he put it, "never did anything in baseball better than anyone else, but always did everything superbly well," thought that Anderson was less appreciated than, for example, Robert A. Heinlein for that reason. Still, master storytellers are not easy to come by, and now that, for the first time, his monumental Technic Civilization series will be published in internal chronological order in these volumes, the arbiters of science fiction as literature may give him his due. His grateful readers gave him his rightful due long ago, of course, and still do.

—Hank Davis  
2008

## MARGIN OF PROFIT

It WAS an anachronism to have a human receptionist in this hall of lucent plastic, among machines that winked and talked between jade columns soaring up into vaulted dimness—but a remarkably pleasant one when she was as long-legged and redheaded a stunblast as the girl behind the desk. Captain Torres drew to a crisp halt and identified himself. Traveling down sumptuous curves, his glance was jarred by the needle gun at her waist.

"Good day, sir," she smiled. "I'll see if Freeman van Rijn is ready for you." She switched on an intercom. A three-megavolt oath bounced out. "No, he's still in conference on the audivid. Won't you be seated?"

Before she turned the intercom off, Torres caught a few words: "—he'll give us the exclusive franchise or we embargo, *ja*, and maybe arrange a little blockade too. Who in Satan's squatpot do these emperors on a single planet think they are? Hokay, he has a million soldiers under arms. You go tell him to take those soldiers, with hobnailed boots and rifles at port, and stuff them—" *Click*.

Torres wrapped cape around tunic and sat down, laying one polished boot across the other knee of his white culottes. He felt awkward, simultaneously overdressed and naked. The formal garb of a Lodgemaster in the Federated Brotherhood of Spacefarers was a far remove from the coverall he wore in his ship or the loungers of groundside leave. And the guards in the lobby, a kilometer below, had not only checked his credentials and retinal patterns, they had made him deposit his sidearm.

Damn Nicholas van Rijn and the whole Polesotechnic League! Good saints, drop him on Pluto with no underwear!

Of course, a merchant prince did have to be wary of kidnappers and assassins, though van Rijn himself was said to be murderously fast with a handgun. Nevertheless, arming your receptionist was not a polite thing to do.

Torres wondered, a trifle wistfully, if she was among the old devil's mistresses. Perhaps not. However, given the present friction between the Company—by extension, the entire League—and the Brotherhood, she'd have no time for him; her contract doubtless had a personal fealty clause. His gaze went to the League emblem on the wall behind her, a golden sunburst afire with jewels, surrounding an ancient rocketship, and the motto: *All the traffic will bear*. That could be taken two ways, he reflected sourly. Beneath it was the trademark of this outfit, the Solar Spice & Liquors Company.

The girl turned the intercom back on and heard only a steady rumble of obscenities. "You may go in now, please," she said, and to the speaker: "Lodgemaster Captain Torres, sir, here for his appointment."

The spaceman rose and passed through the inner door. His lean dark features were taut. This would be a new experience, meeting his ultimate boss. It was ten years since he had had to call anybody "sir" or "madam."

The office was big, an entire side transparent, overlooking a precipitous vista of Djakarta's towers, green landscape hot with tropical gardens, and the molten glitter of the Java Sea. The other walls were lined with the biggest datacom Torres had ever seen, with shelves of extraterrestrial curios, and, astonishingly, a thousand or more codex-type books whose fine leather bindings showed signs of wear. Despite its expanse, the desktop was littered, close to maximum entropy. The most noticeable object on it was a small image of St. Dismas, carved from Martian sandroot. Ventilators could not quite dismiss a haze and reek of tobacco smoke.

The newcomer snapped a salute. "Lodgemaster Captain Rafael Torres speaking for the Brotherhood. Good day, sir."

Van Rijn grunted. He was a huge man, two meters in height and more than broad enough to match. A triple chin and swag belly did not make him appear soft. Rings glittered on hairy fingers and bracelets on brawny wrists, under snuff-soiled lace. Small black eyes, set close to a great hook nose under a sloping forehead, peered with laser intensity. He continued filling his pipe and said nothing until he had a good head of steam up.

"So," he growled then, basso profundo, in an accent as thick as himself. "You speak for the whole unspeakable union, I hope. Women members too? I have never understood why they want to say they belong to a brotherhood." Waxed mustaches and long goatee waggled above a gorgeously embroidered waistcoat. Beneath it was only a sarong, which gave way to columnar ankles and bare splay feet.

Torres checked his temper. "Yes, sir. Privately, informally, of course... thus far. I have the honor to represent all locals in the Commonwealth, and lodges outside the Solar System have expressed solidarity. We assume you will be a spokesman for the master merchants of the League."

"In a subliminary way. I will shovel your demands along at my associates, what of them as don't hide too good in their offices and harems. Sit."

Torres gave the chair no opportunity to mold itself to him. Perched on the edge, he proceeded harshly:

"The issue is very simple. The votes are now in, and the result can't surprise you. We are not calling a strike, you realize. But contracts or no, we will not take any more ships through the Kossaluth of Borthu until that menace has been ended. Any owner who tries to hold us to the articles and send us there will be struck. The idea of our meeting today, Freeman van Rijn, is to make that clear and get the League's agreement, without a lot of public noise that might bring on a real fight."

"By damn, you cut your own throats like with a butterknife, slow and outscruciating." The merchant's tone was surprisingly mild. "Not alone the loss of pay and commissions. No, but if Sector Antares is not kept steady supplied, it loses taste maybe for cinnamon and London dry gin. Nor can other companies be phlegmatic about what they

hawk. Like if Jo-Boy Technical Services bring in no more engineers and scientists, the colonies will train up their own. Hell's poxy belles! In a few years, no more market on any planet in those parts. You lose, I lose, we all lose."

"The answer is obvious, sir. We detour around the Kossaluth. I know that'll take us through more hazardous regions, astronomically speaking, unless we go very far aside indeed. However, the brothers and sisters will accept either choice."

"What?" Somehow van Rijn managed a bass scream. "Is you developed feedback of the bowels? Double or quadruple the length of the voyage! Boost heaven-high the salaries, capital goods losses, survivors' compensation, insurance! Halve or quarter the deliveries per year! We are ruined! Better we give up Antares at once!"

The route was already expensive, Torres knew. He wasn't sure whether or not the companies could afford the extra cost; their books were their own secret. Having waited out the dramatics, he said patiently:

"The Borthudian press gangs have been operating for two years now, you know. Nothing that's been tried has stopped them. We have not panicked. If it had been up to the siblings at large, we'd have voted right at the start to bypass that horrorhole. But the Lodgemasters held back, hoping something could be worked out. Apparently that isn't possible."

"See here," van Rijn urged. "I don't like this no better than you. Worse, maybe. The losses my company alone has took could make me weep snot. We can afford it, though. Naked-barely, but we can. Figure it. About fifteen percent of our ships altogether gets captured. We would lose more, traveling through the Gamma Mist or the Stonefields. And those crews would not be prisoners that we are still working to have released. No, they would be kind of dead. As for making a still bigger roundabout through nice clear vacuum, well, that would be safe, but means an absolute loss on each run. Even if your brotherhood will take a big cut in the exorbitant wages you draw, still, consider the tieup of bottom on voyages so long. We do have trade elsewhere to carry on."

Torres' temper snapped across. "Go flush your dirty financial calculations! Try thinking about human beings for once. We'll face meteoroid swarms, infrasons, rogue planets, black holes, radiation bursts, hostile natives—but have you *met* one of those impressed men? I have. That's what decided me, and made me take a lead in getting the Brotherhood to act. I'm not going to risk it happening to me, nor to any lodge sibling of mine. Why don't you and your fellow moneymen conn the ships personally?"

"Ho-o-o," murmured van Rijn. He showed no offense, but leaned across the desk on his forearms. "You tell me, ha?"

Torres must force the story out. "Met him on Arkan III—on the fringe of the Kossaluth, autonomous planet, you recall. We'd put in with a consignment of tea. A ship of theirs was in too, and you can bet your brain we went around in armed parties, ready to shoot any Borthudian who might look like a crimp. Or any Borthudian at all; but they kept to themselves. Instead, I saw him, this man they'd snatched, going on some errand. I spoke to him. My friends and I even tried to capture him, so we could bring him back to Earth and get reversed what that electronic hell-machine had done to him... He fought us and got away. God! He'd've been more free if he were in chains. And still I could feel how he wanted out, he was screaming inside, but he couldn't break the conditioning *and he couldn't go crazy either—*"

Torres grew aware that van Rijn had come around the desk and was thrusting a bottle into his hand.

"Here, you drink some from this," the merchant said. The liquor burned the whole way down. "I have seen a conditioned man myself once, long ago when I was a rough-and-tumbler. A petty native prince had got it done to him, to keep him for a technical expert when he wanted to go home. We did catch him that time, and took him back for treatment." He returned to his chair and rekindled his pipe. "First, though, we got together with the ship's engineer and made us a little firecracker what we blew off at the royal palace." He chuckled. "The yield was about five kilotons."

"If you want to outfit a punitive expedition, sir," Torres rasped, "I guarantee you can get full crews."

"No." Curled, shoulder-length black locks swished greasily as van Rijn shook his head. "You know the League does not have much of a combat fleet. The trouble with capital ships is, they tie up capital. It is one thing to use a tiny bit of force on a planetbound lordling what has got unreasonable. It is another thing to take on somebody what can take you right on back. Simple tooling up for a war with Borthu, let alone fighting one, would bring many member companies close to bankruptcy."

"But what about the precedent, if you tamely let these outrages go on? Who'll be next to make prey of you?"

"*Ja*, there is that. But there is also the Commonwealth government. We try any big-size action, we traders, even though it is far outside the Solar System, and right away we get gibberings about our 'imperialism.' We could get lots of trouble made for us, right here in the heart of civilization. Maybe we get called pirates, because we is not a government ourselves with politicians and bureaucrats telling people what to do. Maybe Sol would actual-like intervene against us on behalf of the Kossaluth, what is 'only exercising sovereignty within its legitimate sphere.' You know how diplomats from Earth has not made any hard effort for getting Borthu to stop. In fact, I tell you, a lot of politicians feel quite chortlesome when they see us wicked profiteers receiving some shaftcraft."

Torres stirred in his seat. "Yes, of course, I'm as disgusted as you with the official reaction, or lack of reaction. But what about the League? I mean, its leaders must have been trying measures short of war. I take it those have come to naught."

"You take that, boy, and keep it for yourself, because I for sure don't want it. *Ja*. Correct. Threats the Borthudians grin at, knowing how hard pinched we is and where. Not good trade offers nor economic sanctions has

worked; they is not interested in trade with us. Rathermore, they do expect we will soon shun their territory, like you now want us to. That suits their masters well, not having foreign influentials... Bribes? How do you bribe a being what ranks big in his own civilization and species, both those alien to you? Assassins? *Acb*, I am afraid we squandered several good assassins for no philanthropic result." Van Rijn cursed for two straight minutes without repeating himself. "And there they sit, fat and greedy-gut, across the route to Antares and all stars beyond! It is not to be stood for! No, it is to be jumped on!"

Presently he finished in a calmer tone: "This ultimatum of yours brings matters to a head. Speaking of heads, it is getting time for a tall cold beer. I will soon throw a little brainbooting session with a few fellows and see what oozes out. Maybe we can invent something. You go tell the crewmen they should sit bottom-tight for a while yet, *nie*? Now, would you like to join me in the bar?—No? Then good day to you, Captain, if possible."

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It is a truism that the structure of a society is basically determined by its technology. Not in an absolute sense—there may be totally different cultures using identical tools—but the tools settle the possibilities; you can't have interstellar trade without spaceships. A race limited to a single planet, possessing a high knowledge of mechanics but with its basic machines of industry and war requiring a large capital investment, will inevitably tend toward collectivism under one name or another. Free enterprise needs elbow room.

Automation and the mineral wealth of the Solar System made the manufacture of most goods cheap. The cost of energy nosedived when small, clean, simple fusion units became available. Gravitics led to the hyperdrive, which opened a galaxy to exploitation. This also provided a safety valve. A citizen who found his government oppressive could often emigrate elsewhere, an exodus—the Breakup, as it came to be called—that planted liberty on a number of worlds. Their influence in turn loosened bonds upon the mother planet.

Interstellar distances being what they are, and intelligent races having their separate ideas of culture, there was no political union of them. Nor was there much armed conflict; besides the risk of destruction, few had anything to fight about. A race rarely gets to be intelligent without an undue share of built-in ruthlessness, so all was not sweetness and fraternity. However, the various balances of power remained fairly stable. Meanwhile the demand for cargoes grew huge. Not only did colonies want the luxuries of home, and home want colonial products, but the older civilizations had much to swap. It was usually cheaper to import such things than to create the industry needed to make synthetics and substitutes.

Under such conditions, an exuberant capitalism was bound to arise. It was also bound to find mutual interests, form alliances, and negotiate spheres of influence. The powerful companies might be in competition, but their magnates had the wit to see that, overriding this, they shared a need to cooperate in many activities, arbitrate disputes among themselves, and present a united front to the demands of the state—any state.

Governments were limited to a few planetary systems at most; they could do little to control their cosmopolitan merchants. One by one, through bribery, coercion, or sheer despair, they gave up the struggle.

Selfishness is a potent force. Governments, officially dedicated to altruism, remained divided. The Polesotechnic League became a loose kind of supergovernment, sprawling from Canopus to Deneb, drawing its membership and employees from perhaps a thousand species. It was a horizontal society, cutting across political and cultural boundaries. It set its own policies, made its own treaties, established its own bases, fought its own battles... and for a time, in the course of milking the Milky Way, did more to spread a truly universal civilization and enforce a solid *Pax* than all the diplomats in known history.

Nevertheless, it had its troubles.

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A mansion among those belonging to Nicholas van Rijn lay on the peak of Kilimanjaro, up among the undying snows. It was an easy spot to defend, just in case, and a favorite for conferences.

His car slanted down through a night of needle-sharp stars, toward high turrets and glowing lights. Looking through the canopy, he picked out Scorpio. Antares flashed a red promise. He shook his fist at the fainter, unseen suns between him and it. "So!" he muttered. "Monkey business with van Rijn. The whole Sagittarius direction waiting to be opened, and you in the way. By damn, this will cost you money, gut and kipper me if it don't."

He thought back to days when he had ridden ships through yonder spaces, bargaining in strange cities or stranger wildernesses, or beneath unblue skies and in poisonous winds, for treasures Earth had not yet imagined. For a moment, wistfulness tugged at him. A long time now since he had been any further than the Moon... poor, aging fat man, chained to a single planet and cursed whenever he turned an honest credit. The Antares route was more important than he cared to admit aloud. If he lost it, he lost his chance at the pioneering that went on beyond, to corporations with offices on the other side of the Kossaluth. You went on expanding or you went under, and being a conspicuous member of the League wouldn't save you. Of course, he could retire, but then what would there be to engage his energies?

The car landed itself. Household staff, liveried and bewepioned, sprang to flank him as he emerged. He wheezed thin chill air into sooty lungs, drew his cloak of phosphorescent onthar skin tightly around him, and scrunched up a

graveled garden path to the house. A new maid stood at the door, pert and pretty. He tossed his plumed cap at her and considered making a proposition, but the butler said that the invited persons were already here. Seating himself, more for show than because of weariness, he told the chair, "Conference room" and rolled along corridors paneled in the woods of a dozen planets. A sweet smell of attar of janie and a softly played Mozart quintet enlivened the air.

Four colleagues were poised around a table when he entered, a datacom terminal before each. Kraaknach of the Martian Transport Company was glowing his yellow eyes at a Frans Hals on the wall. Firmage of North American Engineering registered impatience with a puffed cigar. Mjambo, who owned Jo-Boy Technical Services, was talking into his wristphone, but stopped when his host entered. Gornas-Kiew happened to be on Earth and was authorized to speak for the Centaurian conglomerate; "he" sat hunched into "his" shell, naught moving save the delicate antennae.

Van Rijn plumped his mass into an armchair at the head of the table. Waiters appeared with trays of drinks, snacks, and smokes catered for the individuals present. He took a large bite from a limburger-and-onion sandwich and looked inquiringly at the rest.

Kraaknach's face, owlish within the air helmet, turned to him. "Well, Freeman who receives us," he trilled and croaked, "I understand we are met on account of this Borthudian *brokna*. Did the spacemen make their expected demand?"

"Ja." Van Rijn chose a cigar and rolled it between his fingers. "The situation is changed from desperate to serious. They will not take ships through the Kossaluth, except to fight, while this shanghai business goes on."

"I suppose it is quite unfeasible to deliver a few gigatons' worth of warhead at the Borthudian home planet?" asked Mjambo.

Van Rijn tugged his goatee. "Death and damnation!" He checked his temper. After all, he had invited these specific sophonts here precisely because they had not yet been much concerned with the problem. It had affected their enterprises in varying degrees, of course, but interests elsewhere had been tying up their direct attention. This tiny, outlying corner of the galaxy which Technic civilization has slightly explored is that big and various. Van Rijn was hoping for a fresh viewpoint.

Having repeated the objections he had given Torres, he added: "I must got to admit, also, supposing we could, slaughtering several billion sentient beings because their leaders make trouble for us is not nice. I do not think the League would long survive being so guilty. Besides, it is wasteful. They should better be made customers of ours."

"Limited action, whittling down their naval strength till they see reason?" wondered Firmage.

"I have had more such programs run through the computers than there is politicians in hell," van Rijn answered. "They every one give the same grismal answer. Allowing for minimal losses, compensations, salaries, risk bonuses, construction, maintenance, replacement, ammunition, depreciation, loss of business due to lack of supervision elsewhere, legal action brought by the Solar Commonwealth and maybe other governments, bribes, loss of profit if the money was invested where it ought to be, et bloody-bestonkered cetera... in a nutshell, we cannot afford it." Reminded, he told the butler, "Simmons, you gluefoot, a bowl of mixed-up nuts, chop-chop, only you don't chop them, understand?"

"You will pardon my ignorance, good sirs," clicked Gornas-Kiew's vocalizer. "I have been quite marginally aware of this unpleasantness. Why are the Borthudians impressing human crews?"

Firmage and Mjambo stared. They had known Centaureans are apt to be single-minded—but this much? Van Rijn simply cracked a Brazil nut between his teeth, awing everybody present except for Gornas-Kiew, and reached for a snifter of brandy. "The gruntbrains have not enough of their own," he said.

"Perhaps I can make it clear," said Kraaknach. Like many Martians of the SIRRUCH Horde—the latest wave of immigrants to Earth's once desolate neighbor—he was a natural-hatched lecturer. He ran a clawed hand across gray feathers, stuck a rinn tube through the intake sphincter on his helmet, and lit it.

"Borthu is a backward planet, terrestroid to eight points, with autochthons describable as humanoid," he began. "They were at an early industrial, nuclear-power stage when explorers visited them, and their reaction to the presence of a superior culture was paranoid. At least, it was in the largest nation, which shortly proceeded to conquer the rest. It had modernized technologically with extreme rapidity, aided by certain irresponsible elements of this civilization who helped it for high pay. United, the Borthudians set out to acquire an interstellar empire. Today they dominate a space about forty light-years across, though they actually occupy just a few Solar-type systems within it. By and large, they want nothing to do with the outside universe: doubtless because the rulers fear that such contact will be dangerous to the stability of their regime. Certainly they are quite able to supply their needs within the boundaries of their dominion—with the sole exception of efficient spacemen. If we ourselves, with all our capabilities in the field of robotics, have not yet been able to produce totally automated spacecraft which are reliable, how much worse must the Borthudians feel the lack of enough crews."

"Hm," said Firmage. "I've already thought about subversion. I can't believe their whole populace is happy. If we could get only a few regularly scheduled freighters in there... double agents... the Kossalu and his whole filthy government overthrown from within—"

"Of course we will follow that course in due course, if we can," van Rijn interrupted. "But at best it takes much time. Meanwhile, competitors sew up the Sagittarius frontier. We need a *quick* way to get back our routes through that space."

Kraaknach puffed oily smoke. "To continue," he said, "the Borthudians can build as many ships as they wish, which is a great many since their economy is expanding. In fact, that economy requires constant expansion if the whole empire is not to collapse, inasmuch as the race-mystique of its masters has promoted a population explosion. But they cannot produce trained spacehands at the needful rate. Pride, and a not unjustified fear of ideological contamination, prevents them from sending students to Technic planets, or hiring from among us; and they have only one understaffed astronomical academy of their own."

"I know," said Mjambo. "It'd be a whopping good market for me if we could change their minds for them."

"Accordingly," Kraaknach proceeded, "they have in the past two years taken to waylaying our vessels. Doubtless they expect to be shunned eventually, as the Brotherhood has now voted to do. But then they can afford to let much of their population die back, while using what manned ships they have to maintain the rest. Without fear of direct or indirect interference from outside, the masters can 'remold' Borthudian society at leisure. It is a pattern not unknown to Terrestrial history, I believe.

"At present, their actions are obviously in defiance of what has been considered interstellar law. However, only the Commonwealth, among governments, has the potential of doing anything about it—and there is such popular revulsion on Earth at the thought of war that the Commonwealth has confined itself to a few feeble protests. Indeed, a strong faction in it is not displeased to see the arrogant Polesotechnic League discomfited. Certain spokesmen are even arguing that territorial sovereignty should be formally recognized as extending through interstellar space. A vicious principle if ever there was one, *brui?*"

He extracted the rinn tube and dropped it down an ashtaker. "In any event," he finished, "they capture the men, brain-channel them, and assign them to their own transport fleet. It takes years to train an astronaut. We are losing a major asset in this alone."

"Can't we improve our evasive action?" inquired Firmage. "Any astronomical distance is so *damn* big. Why can't we avoid their patrols altogether?"

"Eighty-five percent of our ships do precisely that," van Rijn reminded him. "It is not enough. The unlucky minority—"

—who were detected by sensitive instruments within the maximum range of about a light-year, by the instantaneous pseudogravitational pulses of hyperdrive; on whom the Borthudians then closed in, using naval vessels which were faster and more maneuverable than merchantmen—

"—they is gotten to be too many by now. The Brotherhood will accept no more. Confidential amongst the we of us, I would not either. And, *ja*, plenty different escape tactics is been tried, as well as cutting engines and lying low. None of them work very good."

"Well, then, how about convoying our ships through?" Firmage persisted.

"At what cost? I have been with the figures. It also would mean operating the Antares run at a loss—quite apart from those extra warcraft we would have to build. It would make Sagittarian trade out of the damned question."

"Why can't we arm the merchantmen themselves?"

"Bah! Wasn't you listening to Freeman Kraaknach? Robotics is never yet got to where live brains can be altogether replaced, except in bureaucrats." Deliberately irritating, which might pique forth ideas, van Rijn added what was everybody's knowledge:

"A frigate-class ship needs twenty men for the weapons and instruments. An unarmed freighter needs only four. Consider the wages paid to spacefolk; we would really get folked. Also, sixteen extra on every ship would mean cutting down operations elsewhere, for lack of crews. Not to mention the cost of the outfitting. We cannot afford all this; we would lose money in big fat globs. What is worse, the Kossalu knows we would. He need only wait, holding back his fig-plucking patrols, till we is too broke to continue. Then he would maybe be tempted to start conquering some more, around Antares."

Firmage tapped the table with a restless finger. "Everything we've thought of seems to be ruled out," he said. "Suggestions, anybody?"

Silence grew, under the radiant ceiling.

Gornas-Kiew broke it: "Precisely how are captures made? It is impossible to exchange shots while in hyperdrive."

"Statistically impossible," amended Kraaknach. "Energy beams are out of the question. Material missiles have to be hypered themselves, or they would revert to true, sublight velocity and be left behind as soon as they emerged from the drive field. Furthermore, to make a hit, they must be precisely in phase with the target. A good pilot can phase in on another ship, but the operation involves too many variables for any cybernet of useful size."

"I tell you how," snarled van Rijn. "The pest-bedamned Borthudians detect the vibration-wake from afar. They compute an intercept course. Coming close, they phase in and slap on a tractor beam. Then they haul themselves up alongside, burn through the hull or an airlock, and board."

"Why, the answer looks simple enough," said Mjambo. "Equip our craft with pressor beams. Keep the enemy ships at arm's length."

"You forget, esteemed colleague, that beams of either positive or negative sign are powered from the engine," said Kraaknach. "A naval vessel has much stronger engines than a merchantman."

"Give our crews small arms. Let them blast down the boarding parties."

"The illegitimate-offspring-of-interspecies-crosses Borthudians already have arms, also hands what hold weapons," snorted van Rijn. "Phosphor and farts! Do you think four men can stand off twenty?"

"M-m-m... yes, I see your point." Firmage nodded. "But look here, we can't do anything about this without laying out *some* cash. I'm not sure what the mean profit is—"

"On the average, for everybody's combined Antarean voyages, about thirty percent on each run," said van Rijn promptly.

Mjambo started. "How the devil do you get the figures for my company?" he exclaimed.

Van Rijn grinned and drew on his cigar.

"That gives us a margin to use," said Gornas-Kiew. "We can invest in military equipment to such an extent that our profit is less—though I agree there must still be a final result in the black—for the duration of this emergency."

"It'd be worth it," said Mjambo. "In fact, I'd take a fair-sized loss just to teach those bastards a lesson."

"No, no." Van Rijn lifted a hand which, after years in offices, was still the broad muscular paw of a working spaceman. "Revenge and destruction are un-Christian thoughts. Also, I have told you, they do not pay very well, since it is hard to sell anything to a corpse. The problem is to find some means inside our resources what will make it unprofitable for Borthu to raid us. Not being stupid heads, they will then stop raiding and we can maybe later do business."

"You're a cold-blooded one," said Mjambo.

"Not always," replied van Rijn blandly. "Like a sensible man, I set my thermostat according to what is called for. In this case, what we need is a scientific approach with elegant mathematics—"

Abruptly he dropped his glance and covered a shiver by pouring himself another glassful. He had gotten an idea.

When the others had argued for a fruitless hour, he said: "Freemen, this gets us nowhere, *nie?* Perhaps we are not stimulated enough to think clear."

"What do you propose?" sighed Mjambo.

"Oh... an agreement. A pool, or prize, or reward for whoever solves this problem. For example, ten percent of everybody else's Antarean profits for the next ten years."

"Hoy, there!" burst from Firmage. "If I know you, you robber, you've come up with an answer."

"No, no, no. By my honor I swear it. I have some beginning thoughts, maybe, but I am only a poor rough old space walloper without the fine education you beings have had. I could too easy be wrong."

"What is your notion?"

"Best I not say yet, until it is more fermented. But please to note, he who tries something active will take on the risk and expense. If he succeeds, he saves profits for all. Does not a tiny return on his investment sound fair and proper?"

There was more argument. Van Rijn smiled with infinite benevolence. He settled at last for a compact, recorded on ciphertape, whose details would be computed later.

Beaming, he clapped his hands. "Freemen," he said, "we have worked hard tonight and soon comes much harder work. By damn, I think we deserve a little celebration. Simmons, prepare an orgy."

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Rafael Torres had considered himself unshockable by any mere words. He was wrong. "Are you serious?" he gasped.

"In confidentials, of course," van Rijn answered. "The crew must be good men like you. Can you recommend more?"

"No—"

"We will not be stingy with the bonuses."

Torres shook his head violently. "Out of the question, sir. The Brotherhood's refusal to enter the Kossaluth on anything except a punitive expedition is absolute. This one you propose is not, as you describe it. We can't lift the ban without another vote, which would necessarily be a public matter."

"You can publicly vote again after we see if the idea works," van Rijn pressed him. "The first trip will have to be secret."

"Then the first trip will have to do without a crew."

"Bile on a boomerang!" Van Rijn's fist crashed against his desk. He surged to his feet. "What sort of putzing cowards do I deal with? In my day we were men! And we had ideals, I can tell you. We would have boosted through hell's open gates if you paid us enough."

Torres sucked hard on his cigarette. "The ban must stand. None but a Lodgemaster can... Well, all right, I'll say it." Anger was a cold flaring in him. "You want men to take an untried ship into enemy sky and invite attack. If they lose, they're condemned to a lifetime of praying, with what's left of their free wills, for death. If they succeed, they win a few measly kilocredits. In either case, you sit back here plump and safe. God damn it, no!"

Van Rijn stood quiet for a while. This was something he had not quite foreseen.

His gaze wandered forth, out the transparency, to the narrow sea. A yacht was passing by, lovely in white sails and slender hull. Really, he ought to spend more time on his own. Money wasn't that important. Was it? This was not such a bad world, this Earth, even when one was being invaded by age and fat. It was full of blossoms and burgundy, clean winds and lovely women, Mozart melodies and fine books. Doubtless his memories of earlier days in space were colored by nostalgia...

He reached a decision and turned around to face his visitor. "A Lodgemaster can come on such a trip without telling peoples," he said. "The union rules give you discretion. You think you can raise two more like yourself, hah?"

"I told you, Freeman, I won't so much as consider it."

"Even if I myself am the skipper?"

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The *Mercury* did not, outwardly, look different after the engineers were finished with her. Her cargo was the same as usual, too: cinnamon, ginger, pepper, cloves, tea, whisky, gin. If he was going to Antares, van Rijn did not intend to waste the voyage. He did omit wines, doubting their quality could stand as rough a trip as this one would be.

The alterations were internal, extra hull bracing and a new and monstrously powerful engine. The actuarial computers estimated the cost of such an outfitting as three times the total profit from all her journeys during an average service life. Van Rijn had winced, but put a shipyard to work.

In truth, his margin was slim, and he was gambling more on it than he could afford to lose. However, if the Kossalu of Borthu had statisticians of his own—always assuming that the idea proved out—

Well, if it didn't, Nicholas van Rijn would die in battle, or be liquidated as too old for usefulness, or become a brain-channeled slave, or be held for a ruinous ransom. The possibilities looked about equally bad.

He installed himself, dark-haired and multiply curved Dorcas Gherardini, and a stout supply of brandy, tobacco, and ripe cheese, in the captain's cabin. One might as well be comfortable. Torres was his mate, Captains Petrovich and Seiichi his engineers. The *Mercury* lifted from Quito Spaceport without fanfare, waited unpretentiously in orbit for clearance, then accelerated on negagrav away from Sol. At the required distance, she went on hyperdrive and outpaced light.

Van Rijn sat back on the bridge and lit his churchwarden pipe. "Now is a month's going to Antares," he said piously. "Good St. Dismas, watch over us."

"I'll stick by St. Nicholas, patron of travelers," replied Torres. "In spite of his being your namesake."

Van Rijn looked hurt. "By damn, do you not respect my morals?"

Torres shrugged. "Well, I admire your courage—nobody can say you lack guts—" van Rijn gave him a hard look—"and if anybody can pull this off, you can. Set a pirate to catch a pirate."

"You younger generations got a loud mouth and no manners." The merchant blew malodorous clouds. "In my day, we said 'sir' to the captain even when we mutinied."

"I'm still worried about a particular detail," admitted Torres. He had had much more to occupy mind and body than the working out of strategies, mainly the accumulation of as many enjoyable memories as possible. "I suppose it's a fairly safe bet that the enemy hasn't yet heard about our travel ban. Still, the recent absence of ships must have made him think. Besides, our course brings us so near a known Borthudian base that we're certain to be detected. Suppose he gets suspicious and dispatches half a dozen vessels to jump us?"

"The likelihood of that is quite low, because he keeps his bloody-be-damned patrol craft cruising far apart, to maximize their chances of spotting a catch. If he feels wary of us, he will simply not attack; but this also I doubt, for a prize is valuable." Van Rijn heaved his bulk onto his feet. One good thing about spacefaring, you could set the gravity-field generator low and feel almost lissome again. "What you at your cockamamie age do not quite understand, my friend, is that there are hardly any certainties in life. Always we must go on probabilities. The secret of success is to make the odds favor you. Then in the long run you are sure to come out ahead. It is your watch now, and I recommend you project a book on statistical theory to pass the time. The data bank has an excellent library. As for me, I will be in conference with Freelady Gherardini."

"I wish to blazes I could run commands of mine the way you run this of yours," said Torres mournfully.

Van Rijn waved an expansive hand. "Why not, my boy, why not? So long as you make money and no trouble for the Company, the Company does not peek over your shoulder. The trouble with you young snapperwhippers is you lack initiative. When you are a poor old feeble fat man like me, you will look back and regret your lost opportunities."

Low-gee or no, the deck thumped beneath his feet as he departed.

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Heaven was darkness filled with a glory of suns. Viewscreens framed the spilling silver of the Milky Way, ruby spark of Antares, curling edge of a nebula limned by the glare of an enmeshed star. Brightest in vision stood Borthu's, yellow as minted gold.

The ship drove on as she had done for a pair of weeks, pulsing in and out of four-space at thousands of times per second, loaded with a tension that neared the detonation point.

On a wardroom bench, Dorcas posed slim legs and high prow with a care so practiced as to be unconscious. She could not pull her eyes from the screen. "It's beautiful," she said in a small voice. "Somehow that doubles the horror."

Van Rijn sprawled beside her, his majestic nose aimed aloft. "What is horrible, my little sinusoid?" he asked.

"Them... waiting to pounce on us and... In God's name, why did I come along?"

"I believe there was mention of a tygron coat and flamedrop earrings."

"But suppose they do capture us." Cold, her fingers clutched at his arm. "What will happen to me?"

"I told you I have set up a ransom fund for you. I told you also, maybe they will not bother to collect it, or maybe we get broken to bits in the fight. Satan's horns and the devil who gave them to him! Be still, will you?"

The audio intercom came to life with Torres' urgent words: "Wake of high-powered ship detected, approaching to intercept."

"All hands to stations!" roared van Rijn.

Dorcas screamed. He tucked her under one arm, carried her down the passageway—collecting a few scratches en route—to his cabin, where he tossed her on the bed and told her she'd better strap in. Puffing, he arrived on the bridge. The visuals showed Petrovich and Seiichi in the engine room, armored, their faces a-glisten with sweat. Torres sat gnawing his lip, fingers unsteady as he tuned instruments.

"Hokay," said van Rijn, "here is the thing we have come for. I hope you each remember what you have to do, because this is not another rehearsal where I can gently correct your thumb-brained mistakes." He whacked his great bottom into the main control chair and secured the safety harness. When his fingers tickled the console, giving computers and efferent circuits their orders, he felt the sensitive response of that entire organism which was the ship. Thus far *Mercury* had been under normal power, the energy generator half-idle. It was good to know how many wild horses he could call up.

The strange vessel drew in communication range, where the two drive fields measurably impinged on each other. As customary, both pilots felt their way toward the same phase and frequency of oscillation, until a radio wave could pass between them and be received. On the bridge of the human craft, the outercom chimed. Torres pressed the accept button and the screen came to life.

A Borthudian officer looked out. His garments clung dead black to a cat-lithe frame. The face was semihuman, though hairless and tinged with blue; yellow eyes smoldered under a narrow forehead. Behind him could be seen his own bridge, a companion who sat before a fire-control terminal, and the usual six-armed basalt idol.

"Terrestrial ship ahoy!" He ripped out fluent Anglic, harshly accented by the shapes of larynx and mouth. "This is Captain Rentharik of the Kossalu's frigate *Gantok*. By the law, most sacred, of the Kossaluth of Borthu, you are guilty of trespass on the domains of His Mightiness. Stand by to be boarded."

"Why, you out-from-under-wet-logs-crawling cockypop!" Van Rijn made himself flush turkey red. "Not bad enough you hijack my men and transports, with their good expensive cargoes, but you have the copperbound nerve to call it legal!"

Rentharik fingered a small ceremonial dagger hung about his neck. "Old man, the writ of the Kossalu runs through this entire volume of space. You can save yourself added punishment—nerve-pulsing—by submitting peacefully to judgment."

"It is understood by *civilized* races that interstellar space is free for every innocent passage."

Rentharik smiled, revealing bright-green teeth of nonhuman shape. "We enforce our own laws here, Captain."

"*Ja*, but by damn, this time you are trying to use force on van Rijn. They are going to be surprised back on that dingleberry you call your home planet."

Rentharik spoke at a recorder in his native language. "I have just made a note recommending you be assigned to the Ilyan run after conditioning. Organic compounds in the atmosphere there produce painful allergic reactions in your species, yet not so disabling that we consider it worthwhile to issue airsuits. Let the rest of your crew pay heed."

Van Rijn's face lit up. "Listen, if you would hire spacemen honest instead of enslaving them, we got plenty of antiallergenic treatments and medicines. I would be glad to supply you them, at quite a reasonable commission."

"No more chatter. You are to be grappled and boarded. Captured personnel receive nerve-pulsing in proportion to the degree of their resistance."

Rentharik's image blanked.

Torres licked sandy lips. Turning up the magnification in a viewscreen, he picked out the Borthudian frigate. She was a darkling shark-form, only half the tonnage of the dumpy merchantman but with gun turrets etched against remote star-clouds. She came riding in along a smooth curve, matched hypervelocities with practiced grace, and flew parallel to her prey, a few kilometers off.

The intercom gave forth a scream. Van Rijn swore as the visual showed him Dorcas, out of her harness and raving around his cabin in utter hysterics. Why, she might spill all his remaining liquor, and Antares still eleven days off!

A small, pulsing jar went through hull and bones. *Gantok* had reached forth a tractor beam and laid hold of *Mercury*.

"Torres," said van Rijn. "You stand by, boy, and take over if somewhat happens to me. I maybe want your help anyway, if the game gets too gamy. Petrovich, Seiichi, you got to maintain our own beams and hold them tight, no matter what. Hokay? We go!"

*Gantok* was pulling herself closer. Petrovich kicked in full power. For a moment, safety arcs blazed blue, ozone spat forth a smell of thunder, a roar filled the air. Then equilibrium was reached, with only a low droning to bespeak unthinkable energies at work.

A pressor beam lashed out, an invisible hammerblow of repulsion, five times the strength of the enemy tractor. Van Rijn heard *Mercury's* ribs groan with the stress. *Gantok* shot away, turning end over end, until she was lost to vision among the stars.

"Ha, ha!" bellowed van Rijn. "We spill their apples, eh? By damn! Next we show them real fun!"

The Borthudian hove back in sight. She clamped on again, full-strength attraction. Despite the pressor, *Mercury* was yanked toward her. Seiichi cursed and gave back his full thrust.

For a moment van Rijn thought his ship would burst open. He saw a deckplate buckle under his feet and heard metal elsewhere shear. But *Gantok* was batted away as if by a troll's fist

"Not so hard! Not so hard, you dumbhead! Let me control the beams." Van Rijn's hands danced over the console. "We want to keep him for a souvenir, remember?"

He used a spurt of drive to overhaul the foe. His right hand steered *Mercury* while his left wielded the tractor and the pressor, seeking a balance. The engine noise rose to a sound like heavy surf. The interior gee-field could not compensate for all the violence of accelerations now going on; harness creaked as his weight was hurled against it. Torres, Petrovich, and Seiichi made themselves part of the machinery, additions to the computer systems which implemented the commands his fingers gave.

The Borthudian's image vanished out of viewscreens as he slipped *Mercury* into a different phase. Ordinarily this would have sundered every contact between the vessels. However, the gravitic forces which he had locked onto his opponent paid no heed to how she was oscillating between relativistic and nonrelativistic quantum states; her mass remained the same. He had simply made her weapons useless against him, unless her pilot matched his travel pattern again. To prevent that, he ordered a program of random variations, within feasible limits. Given time to collect data, perform stochastic analysis, and exercise the intuition of a skilled living brain, the enemy pilot could still have matched; such a program could not be random in an absolute sense. Van Rijn did not propose to give him time.

Now thoroughly scared, the Borthudian opened full drive and tried to break away. Van Rijn equalized positive and negative forces in a heterodyning interplay which, in effect, welded him fast. Laughing, he threw his own superpowered engine into reverse. *Gantok* shuddered to a halt and went backwards with him. The fury of that made *Mercury* cry out in every member. He could not keep the linkage rigid without danger of being broken apart; he must vary it, flexibly, yet always shortening the gap between hulls.

"Ha, like a fish we play him! Good St. Peter the Fisherman, help us not let him get away!"

Through the racket around him, van Rijn heard something snap, and felt a rushing of air. Petrovich cried it for him: "Burst plate—section four. If it isn't welded back soon, we'll take worse damage."

The merchant leaned toward Torres. "Can you take this rod and reel?" he asked. "I need a break from it, I feel my judgment getting less quick, and as for the repair, we must often make such in my primitive old days."

Torres nodded, grim-faced. "You ought to enjoy this, you know," van Rijn reproved him, and undid his harness.

Rising, he crossed a deck which pitched beneath his feet almost as if he were in a watercraft. *Gantok* was still making full-powered spurts of drive, trying to stress *Mercury* into ruin. She might succeed yet. The hole in the side had sealed itself, but remained a point of weakness from which further destruction could spread.

At the lockers, van Rijn clambered into his outsize spacesuit. Hadn't worn armor in a long time... forgotten how quickly sweat made it stink... The equipment he would need was racked nearby. He loaded it onto his back and cycled through the airlock. Emerging on the hull, he was surrounded by a darkness-whitening starblaze.

Any of those shocks that rolled and yawed the ship underfoot could prove too much for the grip of his bootsoles upon her. Pitched out beyond the hyperdrive fields and reverting to normal state, he would be forever lost in a microsecond as the craft flashed by at translight hyperspeed. Infinity was a long ways to fall.

Electric discharges wavered blue around him. Occasionally he saw a flash in the direction of *Gantok*, when phasings happened momentarily to coincide. She must be shooting wildly, on the one-in-a-billion chance that some missile would be in exactly the right state when it passed through *Mercury*... or through van Rijn's stomach... no, through the volume of space where these things coexisted with different frequencies... must be precise...

There was the fit-for-perdition hull plate. Clamp on the jack, bend the thing back toward some rough semblance of its proper shape... ah, heave ho... electric-powered hydraulics or not, it still took strength to do this; maybe some muscle remained under the blubber... lay out the reinforcing bars, secure them temporarily, unlimber your torch, slap down your glare filter... handle a flame and recall past years when he went hell-roaring in his own person... whoops, that lunge nearly tossed him off into God's great icebox!

He finished his job, reflected that the next ship of this model would need still heavier bracing, and crept back to the airlock, trying to ignore the aches that throbbed in his entire body. As he came inside, the rolling and plunging and racketing stopped. For an instant he wondered if he had been stricken deaf.

Torres' face, wet and haggard, popped into an intercom screen. Hoarsely, he said: "They've quit. They must realize their own boat will most likely go to pieces before ours—"

Van Rijn, who had heard him through a sonic pickup in his space helmet, straightened his bruised back and whooped. "Excellent! Now pull us up quick according to plan, you butterbrain!"

He felt the twisting sensation of reversion to normal state, and the hyperdrive thrum died away. Almost he lost his footing as *Mercury* flew off sideways.

It had been Rentharik's last, desperate move, killing his oscillations, dropping solidly back into the ordinary condition of things where no speed can be greater than that of light. Had his opponent not done likewise, had the

ships drawn apart at such an unnatural rate, stresses along the force-beams linking them would promptly have destroyed both, and he would have had that much vengeance. The Terran craft was, however, equipped with a detector coupled to an automatic cutoff, for just this possibility.

Torres barely averted a collision. At once he shifted *Mercury* around until her beams, unbreakably strong, held her within a few meters of *Gantok*, at a point where the weapons of the latter could not be brought to bear. If the Borthudian crew should be wild enough to suit up and try to cross the intervening small distance, to cut a way in and board, it would be no trick to flick them off into the deeps with a small auxiliary pressor.

Van Rijn bellowed mirth, hastened to discard his gear, and sought the bridge for a heart-to-heart talk with Rentharik. "—You is now enveloped in our hyperfield any time we switch it on, and it is strong enough to drag you along no matter what you do with your engines, understand? We is got several times your power. You better relax and let us take you with us peaceful, because if we get any suspicions about you, we will use our beams to pluck your vessel in small bits. Like they say on Earth, what is sauce for the stews is sauce for the pander... Do not use bad language, please; my receiver is blushing." To his men: "Hokay, full speed ahead with this little minnow what thought it was a shark!"

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A laser call as they entered the Antarean System brought a League cruiser out to meet them. The colony was worth that much protection against bandits, political agitators, and other imaginable nuisances. Though every planet here was barren, the innermost long since engulfed by the expansion of the great dying sun, sufficient mineral wealth existed on the outer worlds—together with a convenient location as a trade center for this entire sector—to support a human population equal to that of Luna. Van Rijn turned his prize over to the warcraft and let Torres bring the battered *Mercury* in. Himself, he slept a great deal, while Dorcas kept her ears covered. Though the Borthudians had, sanely, stayed passive, the strain of keeping alert for some further attempt of theirs had been considerable.

Torres had wanted to communicate with the prisoners, but van Rijn would not allow it. "No, no, my boy, we unnormalize them worse by refusing the light of our eyes. I want the good Captain Rentharik's fingernails chewed down to the elbow when I see him again."

Having landed, he invited himself to stay at the governor's mansion in Redsun City and make free use of wine cellar and concubines. Between banquets, he found time to check on local prices and raise the tag on pepper a millicredit per gram. The settlers would grumble, but they could afford it. Besides, were it not for him, their meals would be drab affairs, or else they'd have to synthesize their condiments at twice the cost, so didn't he deserve an honest profit?

After three days of this, he decided it was time to summon Rentharik. He lounged on the governor's throne in the high-pillared reception hall, pipe in right fist, bottle in left, small bells braided into his ringlets but merely a dirty bathrobe across his belly. One girl played on a shiverharp, one fanned him with peacock feathers, and one sat on an arm of the seat, giggling and dropping chilled grapes into his mouth. For the time being, he approved of the universe.

Gaunt and bitter between two League guardsmen, Rentharik advanced across the gleaming floor, halted before his captor, and waited.

"Ah, so. Greetings and salubrifications," van Rijn boomed. "I trust you have had a pleasant stay? The local jails are much recommended, I am told."

"For your race, perhaps," the Borthudian said in dull anger. "My crew and I have been wretched."

"Dear me. My nose bleeds for you."

Pride spat: "More will bleed ere long, you pirate. His Mightiness will take measures."

"Your maggoty kingleet will take no measurements except of how far his chest is fallen," declared van Rijn. "If the civilized planets did not dare fight when he was playing buccaneer, he will not when the foot is in the other shoe. No, he will accept the facts and learn to love them."

"What are your immediate intentions?" Rentharik asked stoically.

Van Rijn stroked his goatee. "Well, now, it may be we can collect a little ransom, perhaps, eh? If not, the local mines are always short of labor, because conditions is kind of hard. Criminals get assigned to them. However, out of my sugar-sweet goodness, I let you choose one person, not yourself, what may go home freely and report what has happened. I will supply a boat what can make the trip. After that we negotiate, starting with rental on the boat."

Rentharik narrowed his eyes. "See here. I know how your vile mercantile society works. You do nothing that has no money return. You are not capable of it. And to equip a vessel like yours—able to seize a warship—must cost more than the vessel can ever hope to earn."

"Oh, very quite. It costs about three times as much. Of course, we gain some of that back from auctioning off our prizes, but I fear they is too specialized to raise high bids."

"So. We will strangle your Antares route. Do not imagine we will stop patrolling our sovereign realm. If you wish a struggle of attrition, we can outlast you."

"Ah, ah." Van Rijn waggled his pipestem. "That is what you cannot do, my friend. You can reduce our gains considerably, but you cannot eliminate them. Therefore we can continue our traffic so long as we choose. You see, each voyage nets an average thirty percent profit."

"But it costs three hundred percent of that profit to outfit a ship—"

"Indeed. But we are only special-equipping every *fourth* ship. That means we operate on a small margin, yes, but a little arithmetic should show you we can still scrape by in the black ink."

"Every fourth?" Rentharik shook his head, frankly puzzled. "What is your advantage? Out of every four encounters, we will win three."

"True. And by those three victories, you capture twelve slaves. The fourth time, we rope in twenty Borthudian spacemen. The loss of ships we can absorb, because it will not go on too long and will be repaid us. You see, you will never know beforehand which craft is going to be the one that can fight back. You will either have to disband your press gangs or quickly get them whittled away." Van Rijn swigged from his bottle. "Understand? You is up against loaded dice which will prong you edgewise unless you drop out of the game fast."

Rentharik crouched, as if to leap, and raged: "I learned, here, that your spacefolk will no longer travel through the Kossaluth. Do you think reducing the number of impressments by a quarter will change that resolution?"

Van Rijn demonstrated what it is to grin fatly. "If I know my spacefolk... why, of course. Because if you do continue to raid us, you will soon reduce yourselves to such few crews as you are helpless. Then you will *have* to deal with us, or else the League comes in and overthrows your whole silly hermit-kingdom system. That would be so quick and easy an operation, there would be no chance for the politicians at home to interfere.

"Our terms will include freeing of all slaves and big fat indemnities. Great big fat indemnities. They do right now, naturally, so the more prisoners you take in future, the worse it will cost you. Any man or woman worth salt can stand a couple years' service on your nasty rustbuckets, if this means afterward getting paid enough to retire on in luxuriance. Our main trouble will be fighting off the excessive volunteers."

He cleared his throat, buttered his tone, and went on: "Is you therefore not wise for making agreement right away? We will be very lenient if you do. Since you are then short of crews, you can send students to our academies at not much more than the usual fees. Otherwise we will just want a few minor trade concessions—"

"And in a hundred years, you will own us," Rentharik half-snarled, half-groaned.

"If you do not agree, by damn, we will own you in much less time than that. You can try impressing more of our people and bleed yourselves to death; then we come in and free them and take what is left of everything you had. Or you can leave our ships alone on their voyages—but then your subjects will soon know, and your jelly-built empire will break up nearly as quick, because how you going to keep us from delivering subversionists and weapons for rebels along the way? Or you can return your slaves right off, and make the kind of bargain with us what I have been pumping at you. In that case, you at least arrange that your ruling class loses power only, in an orderly way, and not their lives. Take your choice. You is well enough hooked that it makes no big matter to me."

The merchant shrugged. "You, personal," he continued, "you pick your delegate and we will let him go report to your chief swine. You might maybe pass on the word how Nicholas van Rijn of the Polesotechnic League does nothing without good reason, nor says anything what is not calm and sensible. Why, just the name of my ship could have warned you."

Rentharik seemed to shrivel. "How?" he whispered.

"Mercury," the man explained, "was the old Roman god of commerce, gambling... and, *ja*, thieves."

**THE END**

Hank Davis

## AFTERWORD TO *MARGIN OF PROFIT*

POUL ANDERSON'S "Margin of Profit" first appeared in the September 1956 issue of *Astounding Science Fiction* and introduced Nicholas van Rijn to the science fiction world. Anderson later included it in *Un-Man and Other Novellas*, a 1962 three-novella collection that made up half of an Ace Double-Novel. For the benefit of collectors, I'll note that the Ace book was number F-139, and had Anderson's *The Makeshift Rocket* on the flip side, a novel featuring what may be the only spaceship in all of sf to be powered by beer, which is why it originally had the title *A Bicycle Built for Brew* when it was serialized in *Astounding*. But I digress...

In 1978, Berkley Putnam published a hefty Anderson volume of Technic Civilization stories titled *The Earth Book of Stormgate*, and "Margin of Profit" was again included, but this was a revised version. This was unusual for Poul Anderson, who sometimes included one of his early stories (earlier, usually, than 1956) in a collection with the comment that, though he would not write the story the same way nowadays and had considered revising it, he suspected that such revision might spoil what was good in the story which a younger Poul Anderson had created. I don't know why he made an exception in this case, though one possibility is that the early story needed some fine-tuning to match the Technic Civilization universe as it later developed. Another is that van Rijn in his debut was not as van Rijnesque as he later became.

One change is understandable, since by 1978 Mars was, alas, looking unlikely to even harbor lichens, let alone intelligent life, so the "small image of St. Dismas, carved from sandroot in the Martian style" in the original version has become "a small image of St. Dismas, carved from Martian sandroot," the carving presumably not done by Martians. A few pages later in the original, van Rijn hosts a meeting of Polesotechnic League leaders, including Kraaknach, one of the "Martians of the SIRRUCH Horde." In the revised version, he is still a Martian, but not a native of the red planet, being one of "the latest wave of immigrants to Earth's once desolate neighbor." (At least he keeps his feathers.) Such immigration was still going on a few hundred years later in the Technic Civilization timeline, since Jupiter has by then been colonized by the Ymirites, extra-Solar beings for whom the fierce conditions on a gas giant are home, sweet home.

The reasons for other changes are less obvious to me, such as van Rijn's secretary Dorothea becoming Dorcas in the later version. Possibly the latter name sounded sexier, and sexiness is definitely a requirement for any of van Rijn's secretaries. Some (but not all) of the mentions of "spacemen" have become "astronauts," possibly to give the story a more contemporary flavor.

At the point in the story where the action gets fast and furious, the original had van Rijn out on the ship's hull doing an emergency repair. Like the ship, he's out of phase with both the universe and the attacking ship, so when an enemy missile goes like a phantom through his stomach, the only harm is to his nerves—the chance of him and the missile happening to be in phase was vanishingly small. In the revised version, though van Rijn worries about the possibility while out on the hull, he and his ample abdomen suffer no such indignity. (In this case, I like the earlier version better.)

There are other differences, but I'll leave further comparisons between the two versions to the reader. I'll mention again that many of the alterations are in van Rijn's dialogue, to make him sound more van Rijnesque. Even Nero Wolfe and Archie Goodwin didn't manage to nail their roles on their first appearance (in the novel *Fer-de-Lance*), and Nick van Rijn is certainly entitled to a retake.

—Hank Davis

## INTRODUCTION TO *THE MAN WHO COUNTS*

THINKING about this early novel after a lapse of years, I believe I can see what its wellsprings are. They include the old pulp conventions of storytelling and a desire to change or, at any rate, spoof these; Falstaff, Long John Silver, and other amiable literary rogues, as well as a few real figures from the Renaissance; L. Sprague de Camp's unique combination of humor and adventure; above all, Hal Clement's marvelously detailed and believable fictional worlds. I do not say that *The Man Who Counts* matches any of its inspirers. Certainly I would write it a bit differently today. Yet it does represent my first serious venture into planet-building and the first full-scale appearance of Nicholas van Rijn. Thus I remain fond of it.

After being serialized in *Astounding* (today's *Analog*) it had a paperback edition. The latter was badly copy-edited and saddled with the ludicrous title *War of the Wing-Men*. I am happy that now, at last, the proper text and name can be restored.

Planet-building is one of the joyous arts, if you have that sort of mind. The object is to construct a strange world which is at the same time wholly consistent, not only with itself but with what science knows of such matters. Any extra-scientific assumptions you make for story purposes—e. g., faster-than-light travel—should not be necessary to the world itself. So, taking a star of a given mass, you calculate how luminous it must be, how long the year is of a planet in a given orbit around it, how much irradiation that planet gets, and several more things. (Of course. I simplify here, since you ought also to take account of the star's age, its chemical composition, etc.) These results will be basically influential on surface features of the planet, kind of life it bears, evolution of that life, and so on endlessly. There is no rigid determinism: at any given stage, many different possibilities open up. However, those which you choose will in their turn become significant parameters at the next stage... until at last, perhaps, you get down to the odor of a flower and what it means to an alien individual.

Because science will never know everything, you are allowed reasonable guesses where calculation breaks down. Nonetheless—quite apart from flaws which sharp-eyed readers may discover in your facts or logic—you can be pretty sure that eventually science *will* make discoveries which cast doubt, to say the very least, on various of your assumptions. History will have moved on, too, in directions you had not foreseen for your imaginary future. You are invited to play what Clement calls "the game" with this unrevised text of mine.

I was saved from making one grievous error, by my wife. Looking over my proposed life cycle of the Diomedean, she exclaimed, "Hey, wait, you have the females flying thousands of miles each year while they're the equivalent of seven months pregnant. It can't be done. I know." I deferred to the voice of experience and redesigned. As I have remarked elsewhere, planet-building ought to be good therapy for the kind of mental patient who believes he's God.

Despite the hazards, I've come back to it again and again, always hoping that readers will share some of the pleasure therein.

—Poul Anderson

## THE MAN WHO COUNTS

### I.

GRAND ADMIRAL Syranaxhyr Urnan, hereditary Commander-in-Chief of the Fleet of Drak'ho, Fisher of the Western Seas, Leader in Sacrifice, and Oracle of the Lodestar, spread his wings and brought them together again in an astonished thunderclap. For a moment, it snowed papers from his desk.

"No!" he said. "Impossible! There's some mistake."

"As my Admiral wills it," Chief Executive Officer Delp hyr Orikan bowed sarcastically. "The scouts saw nothing."

Anger crossed the face of Captain Theonax hyr Urnan, son of the Grand Admiral and therefore heir apparent. His upper lip rose until the canine tusches showed, a white flash against the dark muzzle.

"We have no time to waste on your insolence, Executive Delp," he said coldly. "I would advise my father to dispense with an officer who has no more respect."

Under the embroidered cross-belts of office Delp's big frame tautened. Captain Theonax glided one step toward him. Tails curled back and wings spread, instinctive readiness for battle, until the room was full of their bodies and their hate. With a calculation which made it seem accidental, Theonax dropped a hand to the obsidian rake at his waist. Delp's yellow eyes blazed and his fingers clamped on his own tomahawk.

Admiral Syranax's tail struck the floor. It was like a fire-bomb going off. The two young nobles jerked, remembered where they were, and slowly, muscle by muscle laying itself back to rest under the sleek brown fur, they relaxed.

"Enough!" snapped Syranax. "Delp, your tongue will flap you into trouble yet. Theonax, I've grown bored with your spite. You'll have your chance to deal with personal enemies, when I am fish food. Meanwhile, spare me my few able officers!"

It was a firmer speech than anyone had heard from him for a long time. His son and his subordinate recalled that this grizzled, dim-eyed, rheumatic creature had once been the conqueror of the Maion Navy—a thousand wings of enemy leaders had rattled grisly from the mastheads—and was still their chief in the war against the Flock. They assumed the all-fours crouch of respect and waited for him to continue.

"Don't take me so literally, Delp," said the admiral in a milder tone. He reached to the rack above his desk and got down a long-stemmed pipe and began stuffing it with flakes of dried sea driss from the pouch at his waist. Meanwhile, his stiff old body fitted itself more comfortable into the wood-and-leather seat. "I was quite surprised, of course, but I assume that our scouts still know how to use a telescope. Describe to me again exactly what happened."

"A patrol was on routine reconnaissance about 30 obdisai north-north-west of here," said Delp with care. "That would be in the general area of the island called... I can't pronounce that heathenish local name, sir; it means Banners Flew."

"Yes, yes," nodded Syranax. "I have looked at a map now and then, you know."

Theonax grinned. Delp was no courtier. That was Delp's trouble. His grandfather had been a mere Sailmaker, his father never advanced beyond the captaincy of a single raft. That was after the family had been ennobled for heroic service at the Battle of Xarit'ha, of course—but they had still been very minor peers, a tarry-handed lot barely one cut above their own crew-folk.

Syranax, the Fleet's embodied response to these grim days of hunger and uprooting, had chosen officers on a basis of demonstrated ability, and nothing else. Thus it was that simple Delp hyr Orikan had been catapulted in a few years to the second highest post in Drak'ho. Which had not taken the rough edges off his education, or taught him how to deal with *real* nobles.

If Delp was popular with the common sailors, he was all the more disliked by many aristocrats—a parvenu, a boor, with the nerve to wed a sa Axollon! Once the old admiral's protecting wings were folded in death—

Theonax savored in advance what would happen to Delp hyr Orikan. It would be easy enough to find some nominal charge.

The executive gulped. "Sorry, sir," he mumbled. "I didn't mean... we're still so new to this whole sea... well. The scouts saw this drifting object. It was like nothing ever heard of before. A pair of 'em flew back to report and ask for advice. I went to look for myself. Sir, it's true!"

"A floating object—six times as long as our longest canoe—like ice, and yet not like ice—" The admiral shook his gray-furred head. Slowly, he put dry tinder in the bottom of his firemaker. But it was with needless violence that he drove the piston down into the little hardwood cylinder. Removing the rod again, he tilted fire out into the bowl of his pipe, and drew deeply.

"The most highly polished rock crystal might look a bit like that stuff, sir," offered Delp. "But not so bright. Not with such a *shimmer*."

"And there are animals scurrying about on it?"

"Three of them, sir. About our size, or a little bigger, but wingless and tailless. Yet not just animals either... I think... they seem to wear clothes and—I don't think the shining thing was ever intended as a boat, though. It rides abominably, and appears to be settling."

"If it's not a boat, and not a log washed off some beach," said Theonax "then where, pray tell, is it from? The Deeps?"

"Hardly, captain," said Delp irritably. "If that were so, the creatures on it would be fish or sea mammals or—well, adapted for swimming, anyway. They're not. They look like typical flightless land forms, except for having only four limbs."

"So they fell from the sky, I presume?" sneered Theonax.

"I wouldn't be at all surprised," said Delp in a very low voice. "There isn't any other direction left."

Theonax sat up on his haunches, mouth falling open. But his father only nodded.

"Very good," murmured Syranax. "I'm pleased to see a little imagination around here."

"But where did they fly from?" exploded Theonax.

"Perhaps our enemies of Lannach would have some account of it" said the admiral. "They cover a great deal more of the world every year than we do in many generations; they meet a hundred other barbarian flocks down in the tropics, and exchange news."

"And females," said Theonax. He spoke in that mixture of primly disapproving voice and lickerish overtones with which the entire Fleet regarded the habits of the migrators.

"Never mind that," snapped Delp.

Theonax bristled. "You deckswabber's whelp, do you dare—"

"Shut up!" roared Syranax.

After a pause, he went on: "I'll have inquiries made among our prisoners. Meanwhile we had better send a fast canoe to pick up these beings before that object they're on founders."

"They may be dangerous," warned Theonax.

"Exactly," said his father. "If so, they're better in our hands than if, say, the Lannach'honai should find them and make an alliance. Delp, take the *Nemnis*, with a reliable crew, and crowd sail on her. And bring along that fellow we captured from Lannach, what's his name, the professional linguist—"

"Talk?" The executive stumbled over the unfamiliar pronunciation.

"Yes. Maybe he can talk to them. Send scouts back to report to me, but stand well off the main Fleet until you're sure that the creatures are harmless to us. Also till I've allayed whatever superstitious fears about sea demons there are in the lower classes. Be polite if you can, get rough if you must. We can always apologize later... or toss the bodies overboard. Now, jump!"

Delp jumped.

## II.

DESOLATION walled him in.

Even from this low, on the rolling, pitching hull of the murdered skyscruiser, Eric Wace could see an immensity of horizon. He thought that the sheer size of that ring, where frost-pale heaven met the gray which was cloud and storm-scud and great marching waves, was enough to terrify a man. The likelihood of death had been faced before, on Earth, by many of his forebears; but Earth's horizon was not so remote.

Never mind that he was a hundred-odd light-years from his own sun. Such distances were too big to be understood: they became mere numbers, and did not frighten one who reckoned the pseudo-speed of a secondary-drive spaceship in parsecs per week.

Even the ten thousand kilometers of open ocean to this world's lone human settlement, the trading post, was only another number. Later, if he lived, Wace would spend an agonized time wondering how to get a message across that emptiness, but at present he was too occupied with keeping alive.

But the breadth of the planet was something he could see. It had not struck him before, in his eighteen-month stay; but then he had been insulated, psychologically as well as physically, by an unconquerable machine technology. Now he stood alone on a sinking vessel, and it was twice as far to look across chill waves to the world's rim as it had been on Earth.

The skyscruiser rolled under a savage impact. Wace lost his footing and slipped across curved metal plates. Frantic, he clawed for the light cable which lashed cases of food to the navigation turret. If he went over the side, his boots and clothes would pull him under like a stone. He caught it in time and strained to a halt. The disappointed wave slapped his face, a wet salt hand.

Shaking with cold, Wace finished tucking the last box into place and crawled back toward the entry hatch. It was a miserable little emergency door, but the glazed promenade deck, on which his passengers had strolled while the cruiser's gravbeams bore her through the sky, was awash, its ornate bronze portal submerged.

Water had filled the smashed engine compartment when they ditched. Since then it had been seeping around twisted bulkheads and strained hull plates, until the whole thing was about ready for a last long dive to the sea bottom.

Wind passed icy fingers through his drenched hair and tried to hold open the hatch when he wanted to close it after him. He had a struggle against the gale... Gale? Hell, no! It had only the velocity of a stiffish breeze—but with six times the atmospheric pressure of Earth behind it, that breeze struck like a Terrestrial storm. Damn PLC

2987165III! Damn the PL itself, and damn Nicholas van Rijn, and most particularly damn Eric Wace for being fool enough to work for the Company!

Briefly, while he fought the hatch, Wace looked out over the coaming as if to find rescue. He glimpsed only a reddish sun, and great cloud-banks dirty with storm in the north, and a few specks which were probably natives.

Satan fry those natives on a slow griddle, that they did not come to help! Or at least go decently away while the humans drowned, instead of hanging up there in the sky to gloat!

"Is all in order?"

Wace closed the hatch, dogged it fast, and came down the ladder. At its foot, he had to brace himself against the heavy rolling. He could still hear waves beat on the hull, and the wind-yowl.

"Yes, my lady," he said. "As much as it'll ever be."

"Which isn't much, not?" Lady Sandra Tamarin played her flashlight over him. Behind it, she was only another shadow in the darkness of the dead vessel. "But you look a saturated rat, my friend. Come, we have at least fresh clothes for you."

Wace nodded and shrugged out of his wet jacket and kicked off the squelching boots. He would have frozen up there without them—it couldn't be over five degrees C—but they seemed to have blotted up half the ocean. His teeth clapped in his head as he followed her down the corridor.

He was a tall young man of North American stock, ruddy-haired, blue-eyed, with bluntly squared-off features above a well-muscled body. He had begun as a warehouse apprentice at the age of twelve, back on Earth, and now he was the Solar Spice & Liquors Company's factor for the entire planet known as Diomedes. It wasn't exactly a meteoric rise—Van Rijn's policy was to promote according to results, which meant that a quick mind, a quick gun, and an eye firmly held to the main chance were favored. But it had been a good solid career, with a future of posts on less isolated and unpleasant worlds, ultimately an executive position back Home and—and what was the use, if alien waters were to eat him in a few hours more?

At the end of the hall, where the navigation turret poked up, there was again the angry copper sunlight, low in the wan smoky-clouded sky, south of west as day declined. Lady Sandra snapped off her torch and pointed to a coverall laid out on the desk. Beside it were the outer garments, quilted, hooded, and gloved, he would need before venturing out again into the pre-equinoctial springtime. "Put on everything," she said. "Once the boat starts going down, we will have to leave in a most horrible hurry."

"Where's Freeman van Rijn?" asked Wace.

"Making some last-minute work on the raft. That one is a handy man with the tools, not? But then, he was once a common spacehand."

Wace shrugged and waited for her to leave.

"Change, I told you," she said.

"But—"

"Oh." A thin smile crossed her face. "I thought not there was a nudity taboo on Earth."

"Well... not exactly, I guess, my lady... but after all, you're a noble born, and I'm only a trader—"

"From republican planets like Earth come the worst snobs of all," she said. "Here we are all human beings. Quickly, now, change. I shall turn my back if you desire."

Wace scrambled into the outfit as fast as possible. Her mirth was an unexpected comfort to him. He considered what luck always appeared to befall that potbellied old goat Van Rijn.

It wasn't right!

The colonists of Hermes had been, mostly, a big fair stock, and their descendants had bred true: especially the aristocrats, after Hermes set up as an autonomous grand duchy during the Breakup. Lady Sandra Tamarin was nearly as tall as he, and shapeless winter clothing did not entirely hide the lithe full femaleness of her. She had a face too strong to be pretty—wide forehead, wide mouth, snub nose, high cheekbones—but the large smoky-lashed green eyes, under heavy dark brows, were the most beautiful Wace had ever seen. Her hair was long, straight, ash-blond, pulled into a knot at the moment but he had seen it floating free under a coronet by candlelight—

"Are you quite through, Freeman Wace?"

"Oh... I'm sorry, my lady. I got to thinking. Just a moment!" He pulled on the padded tunic, but left it unzipped. There was still some human warmth lingering in the hull. "Yes. I beg your pardon."

"It is nothing." She turned about. In the little space available, their forms brushed together. Her gaze went out to the sky. "Those natives, are they up there yet?"

"I imagine so, my lady. Too high for me to be sure, but they can go up several kilometers with no trouble at all."

"I have wondered, Trader, but got no chance to ask. I thought not there could be a flying animal the size of a man, and yet these Diomedean have a six-meter span of bat wings. How?"

"At a time like *this* you ask?"

She smiled. "We only wait now for Freeman van Rijn. What else shall we do but talk of curious things?"

"We... help him... finish that raft soon or we'll all go under!"

"He told me he has just batteries enough for one cutting torch, so anyone else is only in the way. Please continue talking. The high-born of Hermes have their customs and taboos, also for the correct way to die. What else is man, if not a set of customs and taboos?" Her husky voice was light, she smiled a little, but he wondered how much of it was an act.

He wanted to say: we're down in the ocean of a planet whose life is poison to us. There is an island a few score kilometers hence, but we only know its direction vaguely. We may or may not complete a raft in time, patched together out of old fuel drums, and we may or may not get our human-type rations loaded on it in time, and it may or may not weather the storm brewing there in the north. Those were natives who swooped low above us a few hours ago, but since then they have ignored us... or watched us... anything except offer help.

Someone hates you or old Van Rijn, he wanted to say. Not me, I'm not important enough to hate. But Van Rijn is the Solar Spice & Liquors Company, which is a great power in the Polesotechnic League, which is *the* great power in the known galaxy. And you are the Lady Sandra Tamarin, heiress to the throne of an entire planet, if you live; and you have turned down many offers of marriage from its decaying, inbred aristocracy, publicly preferring to look elsewhere for a father for your children, that the next Grand Duke of Hermes may be a man and not a giggling clothes horse; so no few courtiers must dread your accession.

Oh, yes, he wanted to say, there are plenty of people who would gain if either Nicholas van Rijn or Sandra Tamarin failed to come back. It was a calculated gallantry for him to offer you a lift in his private ship, from Antares where you met, back to Earth, with stopovers at interesting points along the way. At the very least, he can look for trade concessions in the Duchy. At best... no, hardly a formal alliance; there's too much hell in him; even you—most strong and fair and innocent—would never let him plant himself on the High Seat of your fathers.

But I wander from the subject, my dear, he wanted to say; and the subject is, that someone in the spaceship's crew was bribed. The scheme was well-hatched; the someone watched his chance. It came when you landed on Diomedes, to see what a really new raw planet is like, a planet where even the main continental outlines have scarcely been mapped, in the mere five years that a spoonful of men have been here. The chance came when I was told to ferry you and my evil old boss to those sheer mountains, halfway around this world, which have been noted as spectacular scenery. A bomb in the main generator... a slain crew, engineers and stewards gone in the blast, my co-pilot's skull broken when we ditched in the sea, the radio shattered... and the last wreckage is going to sink long before they begin to worry at Thursday Landing and come in search of us... and assuming we survive, is there the slightest noticeable chance that a few skyboats, cruising a nearly unmapped world twice the size of Earth, will happen to see three human flyspecks on it?

Therefore, he wanted to say, since all our schemings and posturings have brought us merely to this, it would be well to forget them in what small time remains, and kiss me instead.

But his throat clogged up on him, and he said none of it.

"So?" A note of impatience entered her voice. "You are very silent, Freeman Wace."

"I'm sorry, my lady," he mumbled. "I'm afraid I'm no good at making conversation under... uh, these circumstances."

"I regret I have not qualifications to offer to you the consolations of religion," she said with a hurtful scorn.

A long gray-bearded comber went over the deck outside and climbed the turret. They felt steel and plastic tremble under the blow. For a moment, as water sheeted, they stood in a blind roaring dark.

Then, as it cleared, and Wace saw how much farther down the wreck had burrowed, and wondered if they would even be able to get Van Rijn's raft out through the submerged cargo hatch, there was a whiteness that snatched at his eye.

First he didn't believe it, and then he wouldn't believe because he dared not, and then he could no longer deny it.

"Lady Sandra." He spoke with immense care; he *must* not scream his news at her like any low-born Terrestrial.

"Yes?" She did not look away from her smoldering contemplation of the northern horizon, empty of all but clouds and lightning.

"There, my lady. Roughly south-east, I'd guess sails, beating up-wind."

"*What?*" It was a shriek from her. Somehow, that made Wace laugh aloud.

"A boat of some kind," he pointed. "Coming this way."

"I didn't know the natives were sailors," she said, very softly.

"They aren't, my lady—around Thursday Landing," he replied. "But this is a big planet. Roughly four times the surface area of Earth, and we only know a small part of one continent."

"Then you know not what they are like, these sailors?"

"My lady, I have no idea."

### III.

NICHOLAS VAN RIJN came puffing up the companion-way at their shout. "Death and damnation!" he roared. "A boat, do you say, *ja?* Better for you it is a shark, if you are mistaken. By damn!" He stumped into the turret and glared out through salt encrusted plastic. The light was dimming as the sun went lower and the approaching storm clouds swept across its ruddy face. "So! Where is it, this pestilential boat?"

"There, sir," said Wace. "That schooner—"

"Schooner! Schnork! Powder and balls, you cement head, that is a yawl rig... no, wait, by damn, there is a furled square sail on the mainmast too, and, yes, an outrigger—*Ja*, the way she handles, she must have a regular rudder—Good saints help us! A bloody-be-damned-to-blazes dugout!"

"What else do you expect, on a planet without metals?" said Wace. His nerves were worn too thin for him to remember the deference due a merchant prince.

"Hm-m-m... coracles, maybe so, or rafts or catamarans—Quick, dry clothes! Too cold it is for brass monkeys!"

Wace grew aware that Van Rijn was standing in a puddle, and that bitter sea water streamed from his waist and legs. The storeroom where he had been at work must have been awash for—for hours!

"I know where they are, Nicholas." Sandra loped off down the corridor. It slanted more ominously every minute, as the sea pushed in through a ruined stern.

Wace helped his chief off with the sopping coverall. Naked, Van Rijn suggested... what was that extinct ape?... a gorilla, two meters tall, hairy and huge-bellied, with shoulders like a brick warehouse, loudly bawling his indignation at the cold and the damp and the slowness of assistants. But rings flashed on the thick fingers and bracelets on the wrists, and a little St. Dismas medal swung from his neck. Unlike Wace, who found a crew cut and a clean shave more practical, Van Rijn let his oily black locks hang curled and perfumed in the latest mode, flaunted a goatee on his triple chin and intimidating waxed mustaches beneath the great hook nose.

He rummaged in the navigator's cabinet, wheezing, till he found a bottle of rum. "Ahhh! I knew I had the devil-begotten thing stowed somewhere." He put it to his frogmouth and tossed off several shots at a gulp. "Good! Fine! Now maybe we can begin to be like self-respectful humans once more, *nie?*"

He turned about, majestic and globular as a planet, when Sandra came back. The only clothes she could find to fit him were his own, a peacock outfit of lace-trimmed shirt, embroidered waistcoat, shimmersilk culottes and stockings, gilt shoes, plumed hat, and holstered blaster.

"Thank you," he said curtly. "Now, Wace, while I dress, in the lounge you will find a box of Perfectos and one small bottle applejack. Please to fetch them, then we go outside and meet our hosts."

"Holy St. Peter!" cried Wace. "The lounge is under water!"

"Ah?" Van Rijn sighed, woebegone. "Then you need only get the applejack. Quick, now!" He snapped his fingers.

Wace said hastily: "No time, sir. I still have to round up the last of our ammunition. Those natives could be hostile."

"If they have heard of us, possible so," agreed Van Rijn. He began donning his natural-silk underwear. "*Brrr!* Five thousand candles I would give to be back in my office in Jakarta!"

"To what saint do you make the offer?" asked Lady Sandra.

"St. Nicholas, natural—my namesake, patron of wanderers and—"

"St. Nicholas had best get it in writing," she said.

Van Rijn purpled; but one does not talk back to the heiress apparent of a nation with important trade concessions to offer. He took it out by screaming abuse after the departing Wace.

It was some time before they were outside; Van Rijn got stuck in the emergency hatch and required pushing, while his anguished basso obscenities drowned the nearing thunder. Diomedes' period of rotation was only twelve and a half hours, and this latitude, thirty degrees north, was still on the winter side of equinox; so the sun was toppling seaward with dreadful speed. They clung to the lashings and let the wind claw them and the waves burst over them. There was nothing else they could do.

"It is no place for a poor old fat man," snuffed Van Rijn. The gale ripped the words from him and flung them tattered over the rising seas. His shoulder-length curls flapped like forlorn pennons. "Better I should have stayed at home in Java where it is warm, not lost my last few pitiful years out here."

Wace strained his eyes into the gloom. The dugout had come near. Even a landlubber like himself could appreciate the skill of its crew, and Van Rijn was loud in his praises. "I nominate him for the Sunda Yacht Club, by damn, yes, and enter him in the next regatta and make bets!"

It was a big craft, more than thirty meters long, with an elaborate sternpost, but dwarfed by the reckless spread of its blue-dyed sails. Out-rigger or no, Wace expected it to capsize any moment. Of course, a flying species had less to worry about if that should happen than—

"The Diomedean." Sandra's tone was quiet in his ear, under shrill wind and booming waters. "You have dealt with them for a year and a half, not? What can we await for from them?"

Wace shrugged. "What could we expect from any random tribe of humans, back in the Stone Age? They might be poets, or cannibals, or both. All I know is the Tyrlanian Flock, who are migratory hunters. They always stick by the letter of their law—not quite so scrupulous about its spirit, of course, but on the whole a decent tribe."

"You speak their language?"

"As well as my human palate and Techno-Terrestrial culture permit me to, my lady. I don't pretend to understand all their concepts, but we get along—" The broken hull lurched. He heard some abused wall rend, and the inward pouring of still more sea, and felt the sluggishness grow beneath his feet. Sandra stumbled against him. He saw that the spray was freezing in her brows.

"That does not mean I'll understand the local language" he finished. "We're farther from Tyrlan than Europe from China."

The canoe was almost on them now. None too soon: the wreck was due to dive any minute. It came about, the sails rattled down, a sea anchor was thrown and brawny arms dug paddles into the water. Swiftly, then, a Diomedean flapped over with a rope. Two others hovered close, obviously as guards. The first one landed and stared at the humans.

Tyrlan being farther north, its inhabitants had not yet returned from the tropics and this was the first Diomedean Sandra had encountered. She was too wet, cold, and weary to enjoy the unhuman grace of his movements, but she looked very close. She might have to dwell with this race a long time, if they did not murder her.

He was the size of a smallish man, plus a thick meter-long tail ending in a fleshy rudder and the tremendous chiropteran wings folded along his back. His arms were set below the wings, near the middle of a sleek otterlike body, and looked startlingly human, down to the muscular five-fingered hands. The legs were less familiar, bending backward from four-taloned feet which might almost have belonged to some bird of prey. The head, at the end of a neck that would have been twice too long on a human, was round, with a high forehead, yellow eyes with nictitating membranes under heavy brow ridges, a blunt-muzzled black-nosed face with short cat-whiskers, a big mouth and the bear-like teeth of a flesh-eater turned omnivore. There were no external ears, but a crest of muscle on the head helped control flight. Short, soft brown fur covered him; he was plainly a male mammal.

He wore two belts looped around his "shoulders," a third about his waist, and a pair of bulging leather pouches. An obsidian knife, a slender flint-headed ax, and a set of bolas were hung in plain view. Through the thickening dusk, it was hard to make out what his wheeling comrades bore for weapons—something long and thin, but surely not a rifle, on this planet without copper or iron...

Wace leaned forward and forced his tongue around the grunting syllables of Tyrlanian: "We are friends. Do you understand me?"

A string of totally foreign words snapped at him. He shrugged, ruefully, and spread his hands. The Diomedean moved across the hull—bipedal, body slanted forward to balance wings and tail—and found the stud to which the humans' lashings were anchored. Quickly, he knotted his own rope to the same place.

"A square knot," said Van Rijn, almost quietly. "It makes me homesick."

At the other end of the line, they began to haul the canoe closer. The Diomedean turned to Wace and pointed at his vessel. Wace nodded, realized that the gesture was probably meaningless here, and took a precarious step in that direction. The Diomedean caught another rope flung to him. He pointed at it, and at the humans, and made gestures.

"I understand," said Van Rijn. "Nearer than this they dare not come. Too easy their boat gets smashed against us. We get this cord tied around our bodies, and they haul us across. Good St. Christopher, what a thing to do to a poor creaky-boned old man!"

"There's our food, though," said Wace.

The sky cruiser jerked and settled deeper. The Diomedean jittered nervously.

"No, no!" shouted Van Rijn. He seemed under the impression that if he only bellowed loudly enough, he could penetrate the linguistic barrier. His arms windmilled. "No! Never! Do you not understand, you oatmeal brains? Better to guggle down in your pest-begotten ocean than try eating your food. We die! Bellyache! Suicide!" He pointed at his mouth, slapped his abdomen, and waved at the rations.

Wace reflected grimly that evolution was too flexible. Here you had a planet with oxygen, nitrogen, hydrogen, carbon, sulfur... a protein biochemistry forming genes, chromosomes, cells, tissues... protoplasm by any reasonable definition... and the human who tried to eat a fruit or steak from Diomedes would be dead ten minutes later of about fifty lethal allergic reactions. These just weren't the *right* proteins. In fact, only immunization shots prevented men from getting chronic hay fever, asthma, and hives, merely from the air they breathed or the water they drank.

He had spent many cold hours today piling the cruiser's food supplies out here, for transference to the raft. This luxury atmospheric vessel had been carried in Van Rijn's spaceship, ready-stocked for extended picnic orgies when the mood struck him. There was enough rye bread, sweet butter, Edam cheese, lox, smoked turkey, dill pickles, fruit preserves, chocolate, plum pudding, beer, wine, and God knew what else, to keep three people going for a few months.

The Diomedean spread his wings, flapping them to maintain his footing. In the wan stormy light, the thumbs-turned-claws on their leading edge seemed to whicker past Van Rijn's beaky face like a mowing machine operated by some modernistic Death. The merchant waited stolidly, now and then aiming a finger at the stacked cases. Finally the Diomedean got the idea, or simply gave in. There was scant time left. He whistled across to the canoe. A swarm of his fellows came over, undid the lashings and began transporting boxes. Wace helped Sandra fasten the rope about her. "I'm afraid it will be a wet haul, my lady," he tried to smile.

She sneezed. "So this is the brave pioneering between the stars! I will have a word or two for my court poets when I get home... if I do."

When she was across, and the rope had been flown back, Van Rijn waved Wace ahead. He himself was arguing with the Diomedean chief. How it was done without a word of real language between them, Wace did not know, but they had reached the stage of screaming indignation at each other. Just as Wace set his teeth and went overboard, Van Rijn sat mutinously down.

And when the younger man made his drowned-rat arrival on board the canoe, the merchant had evidently won his point. A Diomedean could air-lift about fifty kilos for short distances. Three of them improvised a rope sling and carried Van Rijn over, above the water.

He had not yet reached the canoe when the skycruiser sank.

#### IV.

THE DUGOUT held some hundred natives, all armed, some wearing helmets and breastplates of hard laminated leather. A catapult, just visible through the dark, was mounted at the bows; the stern held a cabin, made from sapling trunks chinked with sea weed, that towered up almost like the rear end of a medieval caravel. On its roof, two helmsmen strained at the long tiller.

"Plain to see, we have found a navy ship," grunted Van Rijn. "Not so good, that. With a trader, I can talk. With some pest-and-pox officer with gold braids on his brain, him I can only shout." He raised small, close-set gray eyes to a night heaven where lightning ramped. "I am a poor old sinner," he shouted, "but this I have not deserved! Do you hear me?"

After a while the humans were prodded between lithe devil-bodies, toward the cabin. The dugout had begun to run before the gale, on two reef points and a jib. The roll and pitch, clamor of waves and wind and thunder, had receded into the back of Wace's consciousness. He wanted only to find some place that was dry, take off his clothes and crawl into bed and sleep for a hundred years.

The cabin was small. Three humans and two Diomedean left barely room to sit down. But it was warm, and a stone lamp hung from the ceiling threw a dim light full of grotesquely moving shadows.

The native who had first met them was present. His volcanic-glass dagger lay unsheathed in one hand, and he held a wary lion-crouch; but half his attention seemed aimed at the other one, who was leaner and older, with flecks of gray in the fur, and who was tied to a corner post by a rawhide leash.

Sandra's eyes narrowed. The blaster which Van Rijn had lent her slid quietly to her lap as she sat down. The Diomedean with the knife flicked his gaze across it, and Van Rijn swore. "You little all-thumbs brain, do you let him see what is a weapon?"

The first autochthone said something to the leashed one. The latter made a reply with a growl in it; then turned to the humans. When he spoke, it did not sound like the same language.

"So! An interpreter!" said Van Rijn. "You speakee Angly, ha? Haw, haw, haw!" He slapped his thigh.

"No, wait. It's worth trying." Wace dropped into Tyrlanian: "Do you understand me? This is the only speech we could possibly have in common."

The captive raised his head-crest and sat up on hands and haunches. What he answered was *almost* familiar. "Speak slowly, if you will," said Wace, and felt sleepiness drain out of him.

Meaning came through, thickly: "You do not use a version (?) of the Carnoi that I have heard before."

"Carnoi—" Wait, yes, one of the Tyrlanians had mentioned a confederation of tribes far to the south, bearing some such name. "I am using the tongue of the folk of Tyrlan."

"I know not that race (?). They do not winter in our grounds. Nor do any Carnoi as a regular (?) thing, but now and then when all are in the tropics (?) one of them happens by, so—" It faded into unintelligibility.

The Diomedean with the knife said something, impatiently, and got a curt answer. The interpreter said to Wace:

"I am Tolk, a *mochra* of the Lannachska—"

"A what of the what?" said Wace.

It is not easy even for two humans to converse, when it must be in different patois of a language foreign to both. The dense accents imposed by human vocal cords and Diomedean ears—they heard farther into the subsonic, but did not go quite so high in pitch, and the curve of maximum response was different—made it a slow and painful process indeed. Wace took an hour to get a few sentences worth of information.

Tolk was a linguistic specialist of the Great Flock of Lannach; it was his function to learn every language that came to his tribe's attention, which were many. His title might, perhaps, be rendered Herald, for his duties included a good deal of ceremonial announcements and he presided over a corps of messengers. The Flock was at war with the Drak'honai, and Tolk had been captured in a recent skirmish. The other Diomedean present was named Delp, and was a high-ranking officer of the Drak'honai.

Wace postponed saying much about himself, less from a wish to be secretive than from a realization of how appalling a task it would be. He did ask Tolk to warn Delp that the food from the cruiser, while essential to Earthlings, would kill a Diomedean.

"And why should I tell him that?" asked Tolk, with a grin that was quite humanly unpleasant.

"If you don't," said Wace, "it may go hard with you when he learns that you did not."

"True." Tolk spoke to Delp. The officer made a quick response.

"He says you will not be harmed unless you yourselves make it necessary," explained Tolk. "He says you are to learn his language so he can talk with you himself."

"What was it now?" interrupted Van Rijn.

Wace told him. Van Rijn exploded. "What? What does he say? Stay here till—Death and wet liver! I tell that filthy toad—" He half rose to his feet. Delp's wings rattled together. His teeth showed. The door was flung open and a pair of guards looked in. One of them carried a tomahawk, another had a wooden rake set with chips of flint.

Van Rijn clapped a hand to his gun. Delp's voice crackled out. Tolk translated: "He says to be calm."

After more parley, and with considerable effort and guesswork on Wace's part: "He wishes you no harm, but he must think of his own people. You are something new. Perhaps you can help him, or perhaps you are so harmful that he dare not let you go. He must have time to find out. You will remove all your garments and implements, and leave them in his charge. You will be provided other clothing, since it appears you have no fur."

When Wace had interpreted for Van Rijn, the merchant said, surprisingly at ease: "I think we have no choice just now. We can burn down many of them, *ja*. Maybe we can take the whole boat. But we cannot sail it all the way home by ourselves. If nothing else, we would starve en route, *nie?* Were I younger, yes, by good St. George, I would fight on general principles. Single-handed I would take him apart and play a xylophone on his ribs, and try to bluster his whole nation into helping me. But now I am too old and fat and tired. It is hard to be old, my boy—"

He wrinkled his sloping forehead and nodded in a wise fashion. "But, where there are enemies to bid against each other, that is where an honest trader has a chance to make a little bit profit!"

## V.

"FIRST," said Wace, "you must understand that the world is shaped like a ball."

"Our philosophers have known it for a long time," said Delp complacently. "Even barbarians like the Lannach'honai have an idea of the truth. After all, they cover thousands of obdisai every year, migrating. We're not so mobile, but we had to work out an astronomy before we could navigate very far."

Wace doubted that the Drak'honai could locate themselves with great precision. It was astonishing what their neolithic technology had achieved, not only in stone but in glass and ceramics; they even molded a few synthetic resins. They had telescopes, a sort of astrolabe, and navigational tables based on sun, stars, and the two small moons. However, compass and chronometer require iron, which simply did not exist in any noticeable quantity on Diomedes.

Automatically, he noted a rich potential market. The primitive Tyrlanians were avid for simple tools and weapons of metal, paying exorbitantly in the furs, gems, and pharmaceutically useful juices which made this planet worth the attention of the Polesotechnic League. The Drak'honai could use more sophisticated amenities, from clocks and slide rules to Diesel engines—and were able to meet proportionately higher prices.

He recollected where he was: the raft *Gerumis*, headquarters of the Chief Executive Officer of the Fleet; and that the amiable creature who sat on the upper deck and talked with him was actually his jailer.

How long had it been since the crash—fifteen Diomedean days? That would be more than a week, Terrestrial reckoning. Several per cent of the Earthside food was already eaten.

He had lashed himself into learning the Drak'ho tongue from his fellow-prisoner Tolk. It was fortunate that the League had, of necessity, long ago developed the principles by which instruction could be given in minimal time. When properly focused, a trained mind need only be told something once. Tolk himself used an almost identical system; he might never have seen metal, but the Herald was semantically sophisticated.

"Well, then," said Wace, still haltingly and with gaps in his vocabulary, but adequately for his purposes, "do you know that this world-ball goes around the sun?"

"Quite a few of the philosophers believe that," said Delp. "I'm a practical (?) one myself, and never cared much one way or another."

"The motion of your world is unusual. In fact, in many ways this is a freak place. Your sun is cooler and redder than ours, so your home is colder. This sun has a *mass*... what do you say?... oh, call it a weight not much less than that of our own; and it is about the same distance. Therefore Diomedes, as we call your world, has a year only somewhat longer than our Earth's. Seven hundred eighty-two Diomedean days, isn't it? Diomedes has more than twice the diameter of Earth, but lacks the heavy materials found in most worlds. Therefore its *gravity*—hell!—therefore I only weigh about one-tenth more here than I would at home."

"I don't understand," said Delp.

"Oh, never mind," said Wace gloomily.

The planetographers were still puzzling about Diomedes. It didn't fall into either of the standard types, the small hard ball like Earth or Mars, or the gas giant with a collapsed core like Jupiter or 61 Cygni C. It was intermediate, with a mass of 4.75 Earths; but its overall density was only half as much. This was due to the nearly total absence of all elements beyond calcium.

There was one sister freak, uninhabitable; the remaining planets were more or less normal giants, the sun a G8 dwarf not very different from other stars of that size and temperature. It was theorized that because of some improbable turbulence, or possibly an odd magnetic effect—a chance-created cosmic mass spectrograph—there had been no heavy elements in the local section of the primordial gas cloud... But why hadn't there at least been a density-increasing molecular collapse at the center of Diomedes? Sheer mass-pressure ought to have produced degeneracy. The most plausible answer to that was, the minerals in the body of this world were not normal ones, being formed in the absence of such elements as chromium, manganese, iron, and nickel. Their crystal structure was apparently more stable than, say, olivine, the most important of the Earth materials condensed by pressure—

The devil with it!

"Never mind that weight stuff," said Delp. "What's so unusual about the motion of Ikthanis?" It was his name for this planet, and did not mean "earth" but—in a language where nouns were compared—could be translated "Oceanest," and was feminine.

Wace needed time to reply; the technicalities outran his vocabulary.

It was merely that the axial tilt of Diomedes was almost ninety degrees, so that the poles were virtually in the ecliptic plane. But that fact, coupled with the cool ultra-violet-poor sun, had set the pattern of life.

At either pole, nearly half the year was spent in total night. The endless daylight of the other half did not really compensate; there were polar species, but they were unimpressive hibernators. Even at forty-five degrees latitude, a fourth of the year was darkness, in a winter grimmer than Earth had ever seen. That was as far north or south as any intelligent Diomedean could live; the annual migration used up too much of their time and energy, and they fell into a stagnant struggle for existence on the paleolithic level.

Here, at thirty degrees north, the Absolute Winter lasted one-sixth of the year—a shade over two Terrestrial months—and it was only (!) a few weeks' flight to the equatorial breeding grounds and back during that time. Therefore the Lannachska were a fairly cultivated people. The Drak'honai were originally from even farther south—

But you could only do so much without metals. Of course, Diomedes had abundant magnesium, beryllium, and aluminum, but what use was that unless you first developed electrolytic technology, which required copper or silver?

Delp cocked his head. "You mean it's always equinox on your Earth?"

"Well, not quite. But by your standards, very nearly!"

"So that's why you haven't got wings. The Lodestar didn't give you any, because you don't need them."

"Uh... perhaps. They'd have been no use to us, anyway. Earth's air is too thin for a creature the size of you or me to fly under its own power."

"What do you mean, thin? Air is... is air."

"Oh, never mind. Take my word for it."

How did you explain gravitational potential to a nonhuman whose mathematics was about on Euclid's level? You could say: "Look, if you go sixty-three hundred kilometers upward from the surface of Earth, the attraction has dropped off to one-fourth; but you must go thirteen thousand kilometers upward from Diomedes to diminish its pull on you correspondingly. Therefore Diomedes can hold a great deal more air. The weaker solar radiation helps, to be sure, especially the relatively less ultraviolet. But on the whole, gravitational potential is the secret.

"In fact, so dense is this air that if it held proportionate amounts of oxygen, or even of nitrogen, it would poison me. Luckily, the Diomedean atmosphere is a full seventy-nine per cent neon. Oxygen and nitrogen are lesser constituents: their partial pressures do not amount to very much more than on Earth. Likewise carbon dioxide and water vapor."

But Wace said only: "Let's talk about ourselves. Do you understand that the stars are other suns, like yours, but immensely farther away; and that Earth is a world of such a star?"

"Yes. I've heard the philosophers wonder—I'll believe you."

"Do you realize what our powers are, to cross the space between the stars? Do you know how we can reward you for your help in getting us home, and how our friends can punish you if you keep us here?"

For just a moment, Delp spread his wings, the fur bristled along his back and his eyes became flat yellow chips. He belonged to a proud folk.

Then he slumped. Across all gulfs of race, the human could sense how troubled he was:

"You told me yourself, Earth'ho, that you crossed The Ocean from the west, and in thousands of obdisai you didn't see so much as an island. It bears our own explorings out. We couldn't possibly fly that far, carrying you or just a message to your friends, without some place to stop and rest between times."

Wace nodded, slowly and carefully. "I see. And you couldn't take us back in a fast canoe before our food runs out."

"I'm afraid not. Even with favoring winds all the way, a beat is so much slower than wings. It'd take us half a year or more to sail the distance you speak of."

"But there must be *some* way—"

"Perhaps. But we're fighting a hard war, remember. We can't spare much effort or many workers for your sake.

"I don't think the Admiralty even intends to try."

## VI.

TO THE SOUTH was Lannach, an island the size of Britain. From it Holmenach, an archipelago, curved northward for some hundreds of kilometers, into regions still wintry. Thus the islands acted as boundary and shield: defining the Sea of Achan, protecting it from the great cold currents of The Ocean.

Here the Drak'honai lay.

Nicholas van Rijn stood on the main deck of the *Gerunis*, glaring eastward to the Fleet's main body. The roughly woven, roughly fitted coat and trousers which a Sailmaker had thrown together for him irritated a skin long used to more expensive fabrics. He was tired of sugar-cured ham and brandied peaches—though when such fare gave out, he would begin starving to death. The thought of being a captured chattel whose wishes nobody need consult was pure anguish. The reflection on how much money the company must be losing for lack of his personal supervision was almost as bad.

"Bah!" he rumbled. "If they would make it a goal of their policy to get us home, it could be done."

Sandra gave him a weary look. "And what shall the Lannachs be doing while the Drak'honai bend all their efforts to return us?" she answered. "It is still a close thing, this war of theirs. Dra'ho could lose it yet."

"Satan's hoof-and-mouth disease!" He waved a hairy fist in the air. "While they squabble about their stupid little territories, the Solar Spice & Liquors is losing a million credits a day!"

"The war happens to be a life-and-death matter for both sides," she said.

"Also for us. *Nie?*" He fumbled after a pipe, remembered that his meerschaums were on the sea bottom, and groaned. "When I find who it was stuck that bomb in my cruiser—" It did not occur to him to offer excuses for getting her into this. But then, perhaps it was she who had indirectly caused the trouble. "Well," he finished on a calmer note, "it is true we must settle matters here, I think. End the war for them so they can do important business like getting me home."

Sandra frowned across the bright sun-blink of waters. "Do you mean help the Drakhonai? I do not care for that so much. They are the aggressors. But then, they saw the wives and little ones hungry—" She signed. "It is hard to unravel. Let such be so, then."

"Oh, no!" Van Rijn combed his goatee. "We help the other side. The Lannachska."

"What!" She stood back from the rail and dropped her jaw at him. "But... but..."

"You see," explained Van Rijn, "I know a little something about politics. It is needful for an honest businessman seeking to make him a little hard-earned profit, else some louse-bound politician comes and taxes it from him for some idiot school or old-age pension. The politics here is not so different from what we do out in the galaxy. It is a culture of powerful aristocrats, this Fleet, but the balance of power lies with the throne—the Admiralty. Now the admiral is old, and his son the crown prince has more to say than is rightful. I waggle my ears at gossip—they forget how much better we hear than they, in this peasoup-with-sausages atmosphere. I know. He is a hard-cooked one, him that T'heonax.

"So we help the Drak'honai win over the Flock. So what? They are already winning. The Flock is only making guerrilla now, in the wild parts of Lannach. They are still powerful, but the Fleet has the upper hand, and need only maintain *status quo* to win. Anyhow, what can we, who the good God did not offer wings, do at guerrillas? We show T'heonax how to use a blaster, well, how do we show him how to find somebodies to use it on?"

"Hm-m-m... yes." She nodded, stiffly. "You mean that we have nothing to offer the Drak'honai, except trade and treaty later on, if they get us home."

"Just so. And what hurry is there for them to meet the League? They are natural wary of unknowns like us from Earth. They like better to consolidate themselves in their new conquest before taking on powerful strangers, *nie?* I hear the scuttled butt, I tell you; I know the trend of thought about us. Maybe T'heonax lets us starve, or cuts our throats. Maybe he throws our stuff overboard and says later he never heard of us. Or maybe, when a League boat finds him at last, he says *ja*, we pulled some humans from the sea, and we was good to them, but we could not get them home in time."

"But could they—actually? I mean, Freeman van Rijn, how would *you* get us home, with any kind of Diomedean help?"

"Bah! Details! I am not an engineer. Engineers I hire. My job is not to do what is impossible, it is to make others do it for me. Only how can I organize things when I am only a more-than-half prisoner of a king who is not interested in meeting my peoples? Hah?"

"Whereas the Lannach tribe is hard pressed and will let you, what they say, write your own ticket. Yes." Sandra laughed, with a touch of genuine humor. "Very good, my friend! Only one question now, how do we get to the Lannachs?"

She waved a hand at their surroundings. It was not an encouraging view.

The *Gerumis* was a typical raft: a big structure, of light tough balsalike logs lashed together with enough open space and flexibility to yield before the sea. A wall of uprights, pegged to the transverse logs, defined a capacious hold and supported a main deck of painfully trimmed planks. Poop and forecabin rose at either end, their flat roofs bearing artillery and, in the former case, the outsize tiller. Between them were seaweed-thatched cabins for storage, workshops, and living quarters. The overall dimensions were about sixty meters by fifteen, tapering toward a false bow which provided a catapult platform and some streamlining. A foremast and mainmast each carried three big square sails, a lateen-rigged mizzen stood just forward of the poop. Given a favoring wind—remembering the force of most winds on this planet—the seemingly awkward craft could make several knots, and even in a dead calm it could be rowed.

It held about a hundred Diomedean plus wives and children. Of those, ten couples were aristocrats, with private apartments in the poop; twenty were ranking sailors, with special skills, entitled to one room per family in the main-deck cabins; the rest were common deckhands, barracked into the forecabin.

Not far away floated the rest of this squadron. There were rafts of various types, some primarily dwelling units like the *Gerumis*, some triple-decked for cargo, some bearing the long sheds in which fish and seaweed were processed. Often several at a time were linked together, to form a little temporary island. Moored to them, or patrolling between, were the outrigger canoes. Wings beat in the sky, where aerial detachments kept watch for an enemy: full-time professional warriors, the core of Drak'ho's military strength.

Beyond this outlying squadron, the other divisions of the Fleet darkened the water as far as a man's eyes would reach. Most of them were fishing. It was brutally hard work, where long nets were trolled by muscle power. Nearly all a Drak'ho's life seemed to go to back-bending labor. But out of these fluid fields they were dragging a harvest which leaped and flashed.

"Like fiends they must drive themselves," observed Van Rijn. He slapped the stout rail. "This is tough wood, even when green, and they chew it smooth with stone and glass tools! Some of these fellows I would like to hire, if the union busybodies can be kept away from them."

Sandra stamped her foot. She had not complained at danger of death, cold and discomfort and the drudgery of Tolk's language lessons filtered through Wace. But there are limits. "Either you talk sense, Freeman, or I go somewhere else! I asked you how we get away from here."

"We get rescued by the Lannachska, of course," said Van Rijn. "Or, rather, they come steal us. Yes, so-fashion will be better. Then, if they fail, friend Delp cannot say it is our fault we are so desired by all parties."

Her tall form grew rigid. "What do you mean? How are they to know we are even here?"

"Maybe Tolk will tell them."

"But Tolk is even more a prisoner than we, not?"

"So. However—" Van Rijn rubbed his hands. "We have a little plan made. He is a good head, him. Almost as good as me."

Sandra glared. "And will you deign to tell me how you plotted with Tolk, under enemy surveillance, when you cannot even speak Drak'ho?"

"Oh, I speak Drak'ho pretty good," said Van Rijn blandly. "Did you not just hear me admit how I eavesdrop on all the palaver aboard? You think just because I make so much trouble, and still sit hours every day taking special instruction from Tolk, it is because I am a dumb old bell who cannot learn so easy? Horse maneuvers! Half the time we mumble together, he is teaching me his own Lannach lingo. Nobody on this raft knows it, so when they hear us say funny noises they think maybe Tolk tries words of Earth language out, ha? They think he despairs of teaching me through Wace and tries himself to pound some Drak'ho in me. Ho, ho, they are bamboozles, by damn! Why, yesterday I told Tolk a dirty joke in Lannachamael. He looked very disgusted. There is proof that poor old Van Rijn is not fat between the ears. We say nothing of the rest of his anatomy."

Sandra stood quiet for a bit, trying to understand what it meant to learn two nonhuman languages simultaneously, one of them forbidden.

"I do not see why Tolk looks disgusted," mused Van Rijn. "It was a good joke. Listen: there was a salesman who traveled on one of the colonial planets, and—"

"I can guess why," interrupted Sandra hastily. "I mean... why Tolk did not think it was a funny tale. Er... Freeman Wace was explaining it to me the other day. Here on Diomedes they have not the trait of, um, constant sexuality. They breed once each year only, in the tropics. No families in our sense. They would not think our"—she blushed—"our all-year-around interest in these questions was very normal or very polite."

Van Rijn nodded. "All this I know. But Tolk has seen somewhat of the Fleet, and in the Fleet they do have marriage, and get born at any time of year, just like humans."

"I got that impression," she answered slowly, "and it puzzles me. Freeman Wace said the breeding cycle was in their, their heredity. Instinct, or glands, or what it now is called. How *could* the Fleet live differently from what their glands dictate?"

"Well, they do." Van Rijn shrugged massive shoulders. "Maybe we let some scientist worry about it for a thesis later on, hah?"

Suddenly she gripped his arm so he winced. Her eyes were a green blaze. "But you have not said... what is to happen? How is Tolk to get word about us to Lannach? What do we do?"

"I have no idea," he told her cheerily. "I play with the ear."

He cocked a beady eye at the pale reddish overcast. Several kilometers away, enormously timbered, bearing what was almost a wooden castle, floated the flagship of all Drak'ho. A swirl of bat wings was lifting from it and streaming toward the *Gerumis*. Faintly down the sky was borne the screech of a blown sea shell.

"But I think maybe we find out quick," finished Van Rijn, "because his rheumatic majesty comes here now to decide about us."

## VII.

THE ADMIRAL'S household troops, a hundred full-time warriors, landed with beautiful exactness and snapped their weapons to position. Polished stone and oiled leather caught the dull light like sea-blink; the wind of their wings roared across the deck. A purple banner trimmed with scarlet shook loose, and the *Gerumis* crew, respectfully crowded into the rigging and on the forecandle roof, let out a hoarse ritual cheer.

Delp hyr Orikan advanced from the poop and crouched before his lord. His wife, the beautiful Rodonis sa Axollon, and his two young children came behind him, bellies to the deck and wings over eyes. All wore the scarlet sashes and jeweled armbands which were formal dress.

The three humans stood beside Delp. Van Rijn had vetoed any suggestion that they crouch, too. "It is not right for a member of the Polesotechnic League, he should get down on knees and elbows. Anyway I am not built for it."

Tolk of Lannach sat haughty next to Van Rijn. His wings were tucked into a net and the leash on his neck was held by a husky sailor. His eyes were as bleak and steady on the admiral as a snake's.

And the armed young males who formed a rough honor guard for Delp, their captain had something of the same chill in their manner—not toward Syranax, but toward his son, the heir apparent on whom the admiral leaned. Their

spears, rakes, tomahawks, and wood-bayoneted blowguns were held in a gesture of total respect: nevertheless, the weapons were held.

Wace thought that Van Rijn's outsize nose must have an abnormal keenness for discord. Only now did he himself sense the tension on which his boss had obviously been counting.

Syranax cleared his throat, blinked, and pointed his muzzle at the humans. "Which one of you is captain?" he asked. It was still a deep voice, but it no longer came from the bottom of the lungs, and there was a mucous rattle in it.

Wace stepped forward. His answer was the one Van Rijn had, hastily and without bothering to explain, commanded that he give: "The other male is our leader, sir. But he does not speak your language very well as yet. I myself still have trouble with it, so we must use this Lannach'ho prisoner to interpret."

T'heonax scrowled. "How should he know what you want to say to us?"

"He has been teaching us your language," said Wace. "As you know, sir, foreign tongues are his main task in life. Because of this natural ability, as well as his special experience with us, he will often be able to guess what we may be trying to say when we search for a word."

"That sounds reasonable." Syranax's gray head wove about. "Yes."

"I wonder!" T'heonax gave Delp an ugly look. It was returned in spades.

"So! By damn, now I talk." Van Rijn rolled forward. "My good friend... um... er... *pokker*, what is the word?—my admiral, we, ahem, we talk-um like good brothers—good brothers, is that how I say-um, Tolk?"

Wace winced. Despite what Sandra had whispered to him, as they were being hustled here to receive the visitors, he found it hard to believe that so ludicrous an accent and grammar were faked.

And why?

Syranax stirred impatiently. "It may be best if we talked through your companion," he suggested.

"*Bilge and barnacles!*" shouted Van Rijn. "Him? No, no, me talkum talky-talk self. Straight, like, um, er, what-is-your-title. We talk-um like brothers, ha?"

Syranax sighed. But it did not occur to him to overrule the human. An alien aristocrat was still an aristocrat, in the eyes of this caste-ridden society, and as such might surely claim the right to speak for himself.

"I would have visited you before," said the admiral, "but you could not have conversed with me, and there was so much else to do. As they grow more desperate, the Lannach'honai become more dangerous in their raids and ambushes. Not a day goes by that we do not have at least a minor battle."

"Hm-m-m?" Van Rijn counted off the declension-comparison on his fingers. "*Xammagapai*... let me see, *xammagan*, *xammagai*... oh, yes. A small fight! I make-um see no fights, old admiral—I mean, honored admiral."

T'heonax bristled. "Watch your tongue, Eart'ho!" he clipped. He had been over frequently to stare at the prisoners, and their sequestered possessions were in his keeping. Little awe remained—but then, Wace decided, T'heonax was not capable of admitting that a being could possibly exist in any way superior to T'heonax.

"And yours, son," murmured Syranax. To Van Rijn: "Oh, they would scarcely venture this far out. I mean our positions on the mainland are constantly harassed."

"Yes," nodded the Terrestrial, rather blankly.

Syranax lay down on the deck in an easy lion-pose. T'heonax remained standing, taut in Delp's presence.

"I have, of course, been getting reports about you," went on the admiral. "They are, ah, remarkable. Yes, remarkable. It's alleged you came from the stars."

"Stars, yes!" Van Rijn's head bobbed with imbecilic eagerness. "We from stars. Far far away."

"Is it true also that your people have established an outpost on the other shore of The Ocean?"

Van Rijn went into a huddle with Tolk. The Lannacha put the question into childish words. After several explanations, Van Rijn beamed. "Yes, yes, we from across Ocean. Far far away."

"Will your friends not come in search of you?"

"They look-um, yes, they look-um plenty hard. By Joe! Look-um all over. You treat-um us good or our friends find out and—" Van Rijn broke off, looking dismayed, and conferred again with Tolk.

"I believe the Eart'ho wishes to apologize for tactlessness," explained the Herald dryly.

"It may be a truthful kind of tactlessness," observed Syranax. "If his friends can, indeed, locate him while he is still alive, much will depend on what kind of treatment he received from us. Eh? The problem is, can they find him that soon? What say, Eart'ho?" He pushed the last question out like a spear.

Van Rijn retreated, lifting his hands as if to ward off a blow. "Help!" he whined. "You help-um us, take us home, old admiral... honored admiral... we go home and pay-um many many fish."

T'heonax murmured in his father's ear: "The truth comes out—not that I haven't suspected as much already. His friends have no measurable chance of finding him before he starves. If they did, he wouldn't be begging us for help. He'd be demanding whatever struck his fancy."

"I would have done that in all events," said the admiral. "Our friend isn't very experienced in these matters, eh? Well, it's good to know how easily truth can be squeezed out of him."

"So," said T'heonax contemptuously, not bothering to whisper, "the only problem is, to get some value out of the beasts before they die."

Sandra's breath sucked sharply in. Wace grasped her arm, opened his mouth, and caught Van Rijn's hurried Anglic murmur: "Shut up! Not a word, you bucket head!" Where upon the merchant resumed his timid smile and attitude of straining puzzlement.

"It isn't right!" exploded Delp. "By the Lodestar, sir, these are guests—not enemies—we can't just *use* them!"

"What else would you do?" shrugged Theonax.

His father blinked and mumbled, as if weighing the arguments for both sides. Something like a spark jumped between Delp and Theonax. It ran along the ranked lines of *Geranis* crew-folk and household troopers as an imperceptible tautening, the barest ripple of muscle and forward slant of weapons.

Van Rijn seemed to get the drift all at once. He recoiled operatically, covered his eyes, then went to his knees before Delp. "No, no!" he screamed. "You take-um us home! You help-um us, we help-um you! You remember say how you help-um us if we help-um you!"

"What's this?" It was a wild-animal snarl from Theonax. He surged forward. "You've been bargaining with them, have you?"

"What do you mean?" The executive's teeth clashed together, centimeters from Theonax's nose. His wing-spurs lifted like knives.

"What sort of help were these creatures going to give you?"

"What do you think?" Delp flung the gage into the winds, and crouched waiting.

Theonax did not quite pick it up. "Some might guess you had ideas of getting rid of certain rivals within the Fleet," he purred.

In the silence which fell across the raft, Wace could hear how the dragon shapes up in the rigging breathed more swiftly. He could hear the creak of timbers and cables, the slap of waves and the low damp mumble of wind. Almost, he heard obsidian daggers being loosened in their sheaths.

If an unpopular prince finds an excuse to arrest a subordinate whom the commoners trust, there are likely going to be men who will fight. It was not otherwise here on Diomedes.

Syranax broke the explosive quiet. "There's some kind of misunderstanding," he said loudly. "Nobody is going to charge anyone with anything on the basis of this wingless creature's gabble. What's the fuss about? What could he possibly do for any of us, anyway?"

"That remains to be seen," answered Theonax. "But a race which can fly across The Ocean in less than an equinoctial day must know some handy arts."

He whirled on a quivering Van Rijn. With the relish of the inquisitor whose suspect has broken, he said curtly: "Maybe we can get you home somehow if you help us. We are not sure how to get you home. Maybe your stuff can help us get you home. You show us how to use your stuff."

"Oh, yes!" said Van Rijn. He clasped his hands and waggled his head. "Oh, yes, good sir, I do you wantum."

Theonax clipped an order. A Drak'ho slithered across the deck with a large box. "I've been in charge of these things," explained the heir. "Haven't tried to fool with it, except for a few knives of that shimmery substance—" Momentarily, his eyes glowed with honest enthusiasm. "You've never *seen* such knives, father! They don't hack or grind, they slice! They'll carve seasoned wood!"

He opened the box. The ranking officers forgot dignity and crowded around. Theonax waved them back.

"Give this blubberpot room to demonstrate," he snapped. "Bowmen, blowgunners, cover him from all sides. Be ready to shoot if necessary."

Van Rijn took out a blaster.

"You mean to fight your way clear?" hissed Wace. "You can't!" He tried to step between Sandra and the menace of weapons which suddenly ringed them in. "They'll fill us with arrows before—"

"I know, I know," growled Van Rijn *sotto voce*. "When will you young pridesters learn, just because he is old and lonely, the boss does not yet have teredos in the brain? You keep back, boy, and when trouble breaks loose, hit the deck and dig a hole."

"What? But—"

Van Rijn turned a broad back on him and said in broken Drak'ho, with servile eagerness: "Here a... how you call it?... thing. It makes fire. It burn-um holes, by Joe."

"A portable flame thrower—that small?" For a moment, an edge of terror sharpened Theonax's voice.

"I told you," said Delp, "we can gain more by dealing honorably with them. By the Lodestar, I think we could get them home, too, if we really tried!"

"You might wait till I'm dead, Delp, before taking the Admiralty," said Syranax. If he meant it as a joke, it fell like a bomb. The nearer sailors, who heard it, gasped. The household warriors touched their bows and blowguns. Rodonis sa Axollono spread her wings over her children and snarled. Deckhand females, jammed into the forecabin, let out a whimper of half-comprehending fear.

Delp himself steadied matters. "Quiet!" he bawled. "Belay there! Calm down! By all the devils in the Rainy Stars, have these creatures driven us crazy?"

"See," chattered Van Rijn, "take *blaster*... we call-um *blaster*... pull-um here—"

The ion beam stabbed out and crashed into the mainmast. Van Rijn yanked it away at once, but it had already made a gouge centimeters deep in that tough wood. Its blue-white flame licked across the deck, whiffed a coiled cable into smoke, and took a section out of the rail, before he released the trigger.

The Drak'honai roared!

It was minutes before they had settled back into the shrouds or onto the decks; curiosity seekers from nearby craft still speckled the sky. However, they were technologically sophisticated in their way. They were excited rather than frightened.

"Let me see that!" Theonax snatched at the gun.

"Wait, wait, good sir, wait." Van Rijn snapped open the chamber, in a set of movements screened by his thick hands, and popped out the charge. "Make-um safe first. There."

Theonax turned it over and over. "What a weapon!" he breathed. "What a *weapon!*"

Standing there in a frosty sweat, waiting for Van Rijn to spoon up whatever variety of hell he was cooking, Wace still managed to reflect that the Drak'honai were overestimating. Natural enough, of course. But a gun of this sort would only have a serious effect on ground-fighting tactics—and the old sharper was coolly disarming all the blasters anyway, no uninstructed Diomedean was going to get any value from them—

"I make safe," Van Rijn burred. "One, two, three, four, five I make safe... Four? Five? Six?" He began turning over the piled-up clothes, blankets, heaters, campstove, and other equipment. "Where other three blasters?"

"What other three?" Theonax stared at him.

"We have six." Van Rijn counted carefully on his fingers. "*Ja*, six. I give-um all to good sir Delp here."

"WHAT?"

Delp leaped at the human, cursing. "That's a lie! There were only three, and you've got them there!"

"Help!" Van Rijn scuttled behind Theonax. Delp's body clipped the admiral's son. Both Drak'honai went over in a whirl of wings and tails.

"*He's plotting mutiny!*" screamed Theonax.

Wace threw Sandra to the deck and himself above her. The air grew dense with missiles.

Van Rijn turned ponderously to grab the sailor in charge of Tolk. But that Drak'ho had already away to Delp's defense. Van Rijn had only to peel off the imprisoning net.

"Now," he said in fluent Lannachamael, "go bring an army to fetch us out of here. Quick, before someone notices!"

The Herald nodded, threshed his wings, and was gone into a sky where battle ran loose.

Van Rijn stooped over Wace and Sandra. "This way," he panted under the racket. A chance tail-buffet, as a sailor fought two troopers, brought a howl from him. "Thunder and lightning! Pest and poison ivy!" He wrestled Sandra to her feet and hustled her toward the comparative shelter of the forecastle.

When they stood inside its door, among terrified females and cubs, looking out at the fight, he said:

"It is a pity that Delp will go under. He has no chance. He is a decent sort; we could maybe have done business."

"All saints in Heaven!" choked Wace. "You touched off a civil war just to get your messenger away?"

"You know perhaps a better method?" asked Van Rijn.

## VIII.

WHEN COMMANDER Krakna fell in battle against the invaders, the Flock's General Council picked one Trolwen to succeed him. They were the elders, and their choice comparatively youthful, but the Lannachska thought it only natural to be led by young males. A commander needed the physical stamina of two, to see them through a hard and dangerous migration every year; he seldom lived to grow feeble. Any rash impulses of his age were curbed by the General Council itself, the clan leaders who had grown too old to fly at the head of their squadron-septs and not yet so old and weak as to be left behind on some winter journey.

Trolwen's mother belonged to the Trekkhan group, a distinguished bloodline with rich properties on Lannach; she herself had added to that wealth by shrewd trading. She guessed that his father was Tornak of the Wendru—not that she cared especially, but Trolwen looked noticeably like that fierce warrior. However, it was his own record as a clan-elected officer, in storm and battle and negotiation and everyday routine, which caused the Council to pick him as leader of all the clans. In the ten-days since, he had been the chief of a losing cause; but possibly his folk were pressed back into the uplands more slowly than would have happened without him.

Now he led a major part of the Flock's fighting strength out against the Fleet itself.

Vernal equinox was barely past, but already the days lengthened with giant strides; each morning the sun rose farther north, and a milder air melted the snows until Lannach's dales were a watery brawling. It took only one hundred thirty days from equinox to Last Sunrise—thereafter, during the endless light of High Summer, there would be nothing but rain or mist to cover an attack.

And if the Drakska were not whipped by autumn, reflected Trolwen grimly, there would be no point in trying further; the Flock would be done.

His wings thrust steadily at the sky, the easy strength-hoarding beat of a wanderer born. Under him there was a broken white mystery of cloud, with the sea far beneath it peering through in a glimmer like polished glass; overhead lay a clear violet-blue roof, the night and the stars. Both moons were up, hasty Flichtan driving from horizon to horizon in a day and a half, Nua so much slower that her phases moved more rapidly than herself. He drew the cold, flowing darkness into his lungs, felt the thrust in muscles and the ripple in fur, but without the sensuous enjoyment of an ordinary flight.

He was thinking too hard about killing.

A commander should not show indecision, but he was young and gray Tolk the Herald would understand. "How shall we know that these beings are on the same raft as when you left?" he asked. He spoke in the measured, breath-conserving rhythm of a route flight. The wind muttered beneath his words.

"We cannot be sure, of course, Flockchief," replied Tolk. "But the fat one considered that possibility, too. He said he would manage, somehow, to be out on deck in plain view every day just at sunrise."

"Perhaps, though," worried Trolwen, "the Draka authorities will have locked him away, suspecting his help in your escape."

"What he did was probably not noticed in all the turmoil," said Tolk.

"And perhaps he cannot help us after all." Trolwen shivered. The Council had spoken strongly against this raid: too risky, too many certain casualties. The turbulent clans had roared their own disapproval. He had had difficulty persuading them all.

And if it turned out he was throwing away lives on something as grotesque as this, for no good purpose—Trolwen was as patriotic as any young male whose folk have been cruelly attacked; but he was not unconcerned about his own future. It had happened in the past that commanders who failed badly were read forever out of the Flock, like any common thief or murderer.

He flew onward.

A chill thin light had been stealing into the sky for a time. Now the higher clouds began to flush red, and a gleam went over the half-hidden sea. It was crucial to reach the Fleet at just about this moment, enough light to see what to do and not enough to give the enemy ample warning.

A Whistler, with the slim frame and outsize wings of adolescence, emerged from a fog-bank. The shrill notes of his lips carried far and keenly. Tolk, who as Chief Herald headed the education of these messenger-scouts, cocked his head and nodded. "We guessed it very well," he said calmly. "The rafts are only five buaska ahead."

"So I hear." Tension shook Trolwen's voice. "Now—"

He broke off. More of the youths were beating upwind into view, faster than an adult could fly. Their whistles wove into an exuberant battle music. Trolwen read the code like his own speech, clamped jaws together, and waved a hand at his standard bearer. Then he dove.

As he burst through the clouds, he saw the Fleet spread enormous, still far below him but covering the waters, from those islands called The Pups to the rich eastern driss banks. Decks and decks and decks cradled on a purplish-gray calm, masts raked upward like teeth, the dawn-light smote the admiral's floating castle and burned off his banner. There was an explosion skyward from rafts and canoes, as the Drak'honai heard the yells of their own sentries and went to arms.

Trolwen folded his wings and stooped. Behind him, in a wedge of clan-squadrons, roared three thousand Lannacha males. Even as he fell, he glared in search—where was that double-cursed Eart'a monster—*there!* The distance-devouring vision of a flying animal picked out three ugly shapes on a raft's quarterdeck, waving and jumping about.

Trolwen spread his wings to brake. "Here!" he cried. The standard bearer glided to a stop, hovered, and unfurled the red flag of Command. The squadrons changed from wedge to battle formation, peeled off, and dove for the raft.

The Drakska were forming their own ranks with terrifying speed and discipline. "All smoke-snuffing gods!" groaned Trolwen. "If we could just have used a single squadron—a raid, not a full-scale battle—"

"A single squadron could hardly have brought the Eart'ska back alive, Flockchief," said Tolk. "Not from the very core of the enemy. We have to make it seem... not worth their while... to keep up the engagement, when we retreat."

"They know ghostly well what we've come for," said Trolwen. "Look how they swarm to that raft!"

The Flock troop had now punched through a shaken line of Draka patrols and reached water surface. One detachment attacked the target vessel, landed in a ring around the humans and then struck out to seize the entire craft. The rest stayed air-borne to repel the enemy's counter-assault.

It was simple, clumsy ground fighting on deck. Both sides were similarly equipped: weapon technology seems to diffuse faster than any other kind. Wooden swords set with chips of flint, fire-hardened spears, clubs, daggers, tomahawks, struck small wicker shields and leather harness. Tails smacked out, talons ripped, wings buffeted and cut with horny spurs, teeth closed in throats, fists battered on flesh. Hard-pressed, a male would fly upward—there was little attempt to keep ranks, it was a free-for-all. Trolwen had no special interest in that phase of the battle; having landed superior numbers, he knew he could take the raft, if only his aerial squadrons could keep the remaining Drakska off.

He thought—conventionally, in the wake of a thousand bards—how much like a dance a battle in the air was: intricate, beautiful, and terrible. To coordinate the efforts of a thousand or more warriors a-wing reached the highest levels of art.

The backbone of such a force was the archers. Each gripped a bow as long as himself in his foot talons, drew the cord with both hands and let fly, plucked a fresh arrow from the belly quiver with his teeth and had it ready to nock before the string snapped taut. Such a corps, trained almost from birth, could lay down a curtain which none might cross alive. But after the whistling death was spent, as it soon was, they must stream back to the bearers for more arrows. That was the most vulnerable aspect of their work, and the rest of the army existed to guard it.

Some cast bolas, some the heavy sharp-edged boomerang, some the weighted net in which a wing-tangled foe could plunge to his death. Blowguns were a recent innovation, observed among foreign tribes in the tropical meeting places. Here the Drakska were ahead: their guns had a bolt-operated repeater mechanism and fire-hardened wooden bayonets. Also, the separate military units in the Fleet were more tightly organized.

On the other hand, they still relied on an awkward set of horn calls to integrate their entire army. Infinitely more flexible, the Whistler corps darted from leader to leader, weaving the Flock into one great wild organism.

Up and down the battle ramped, while the sun rose and the clouds broke apart and the sea grew red-stained. Trolwen clipped his orders: Hunlu to reinforce the upper right flank, Torcha to feint at the admiral's raft while Srygen charged on the opposite wing—

But the Fleet was here, thought Trolwen bleakly, with all its arsenals: more missiles than his fliers, who were outnumbered anyway, could ever have carried. If this fight wasn't broken off soon—

The raft with the Eart'ska had now been seized. Draka canoes were approaching to win it back. One of them opened up with fire weapons: the dreaded, irresistible burning oil of the Fleet, pumped from a ceramic nozzle; catapults throwing vases of the stuff which exploded in gouts of flame on impact. Those were the weapons which had annihilated the boats owned by the Flock, and taken its coastal towns. Trolwen cursed with a reflex anguish when he saw.

But the Eart'ska were off the raft, six strong porters carrying each one in a specially woven net. By changing bearers often, those burdens could be taken to the Flock's mountain stronghold. The food boxes, hastily dragged up from the hold, were less difficult—one porter to each. A Whistler warbled success.

"Let's go!" Orders rattled from Trolwen, his messengers swooped to the appropriate squadrons." Hunlu and Srygen, close ranks about the bearers; Dwarn fly above with half his command, the other half guard the left wing. Rearguards—"

The morning was perceptibly further along before he had disengaged. His nightmare had been that the larger Fleet forces would pursue. A running battle all the way home could have snapped the spine of his army. But as soon as he was plainly in retreat, the enemy broke contact and retired to decks.

"As you predicted, Tolk," panted Trolwen.

"Well, Flockchief," said the Herald with his usual calm, "they themselves wouldn't be anxious for such a melee. It would over-extend them, leave their rafts virtually defenseless—for all they know, your whole idea was to lure them into such a move. So they have merely decided that the Eart'ska aren't worth the trouble and risk: an opinion which the Eart'ska themselves must have been busily cultivating in them."

"Let's hope it's not a correct belief. But however the gods decree, Tolk... you still foresaw this outcome. Maybe you should be Commander."

"Oh, no. Not I. It was the fat Eart'ska who predicted this—in detail."

Trolwen laughed. "Perhaps, then, he should command."

"Perhaps," said Tolk, very thoughtfully, "he will."

## IX.

THE NORTHERN COAST of Lannach sloped in broad valleys to the Sea of Achan; and here, in game-filled forests and on grassy downs, had arisen those thorps in which the Flock's clans customarily dwelt. Where Sagna Bay made its deep cut into the land, many such hamlets had grown together into larger units. Thus the towns came to be Ulwen and flinty Mannenach and Yo of the Carpenters.

But their doors were broken down and their roofs burned open; Drak'ho canoes lay on Sagna's beaches, Dark'ho war-bands laired in empty Ulwen and patrolled the Anch Forest and rounded up the hornbeast herds emerging from winter sleep on Duna Brae.

Its boats sunk, its houses taken, and its hunting and fishing grounds cut off, the Flock retired into the uplands. On the quaking lava slopes of Mount Oborch or in the cold canyons of the Misty Mountains, there were a few small settlements where the poorer clans had lived. The females, the very old and the very young could be crowded into these; tents could be pitched and caves occupied. By scouring this gaunt country from Hark Heath to the Ness, and by going often hungry, the whole Flock could stay alive for a while longer.

But the heart of Lannach was the north coast, which the Drak'honai now forbade. Without it, the Flock was nothing, a starveling tribe of savages... until autumn, when Birthtime would leave them altogether helpless.

"It is not well," said Trolwen inadequately.

He strode up a narrow trail, toward the village—what was its name now? Salmenbrok—which perched on the jagged crest above. Beyond that, dark volcanic rock still streaked with snowfields climbed dizzily upward to a crater hidden in its own vapors. The ground shivered underfoot, just a bit, and van Rijn heard a rumble in the guts of the planet.

Poor isostatic balance... to be expected under these low-density conditions... a geologic history of overly-rapid change, earthquake, eruption, flood, and new lands coughed up from the sea bottom in a mere thousand decades... hence, in spite of all the water, a catastrophically uneven climate... He wrapped the stinking fur blanket they had given him more closely around his rough-coated frame, blew on numbed hands, peered into the damp sky for a glimpse of sun, and swore.

This was no place for a man his age and girth. He should be at home, in his own deeply indented armchair, with a good cigar, a tall drink and the gardens of Jakarta flaming around him. For a moment, the remembrance of Earth was so sharp that he snuffled in self-pity. It was bitter to leave his bones in this nightmare land, when he had thought to pull Earth's soft green turf about his weary body... Hard and cruel, yes, and every day the company must be getting deeper into the red ink without him there to oversee! That hauled him back to practicalities.

"Let me get this all clear in my head," he requested. He found himself rather more at home in Lannachamael than he had been—even without faking—in the Drak'ho speech. Here, by chance, the grammar and the guttural noises were not too far from his mother tongue. Already he approached fluency.

"You came back from your migration and found the enemy was here waiting for you?" he continued.

Trolwen jerked his head in a harsh and painful gesture. "Yes. Hitherto we had only known vaguely of their existence; their home regions are well to the southeast of ours. We knew they had been forced to leave because suddenly the trech—the fish which are the mainstay of their diet—had altered their own habits, shifting from Draka waters to Achan. But we had no idea the Fleet was bound for our country."

Van Rijn's long hair swished, lank and greasy-black, the careful curls all gone out of it, as he nodded. "It is like home history. In the Middle Ages on Earth, when the herring changed their ways for some begobbed herring reason, it would change the history of maritime countries. Kings would fall, by damn, and wars would be fought over the new fishing grounds."

"It has never been of great importance to us," said Trolwen. "A few clans in the Sagna region have... had small dugouts, and got much of their food with hook and line. None of this beast-labor the Drakska go through, dragging those nets, even if they do pull in more fish! But for our folk generally, it was a minor thing. To be sure, we were pleased, several years ago, when the trech appeared in great numbers in the Sea of Achan. It is large and tasty, its oil and bones have many uses. But it was not such an occasion for rejoicing as if, oh, as if the wild hornbeasts had doubled their herds overnight."

His fingers closed convulsively on the handle of his tomahawk. He was, after all, quite young. "Now I see the gods sent the trech to us in anger and mockery. For the Fleet followed the trech."

Van Rijn paused on the trail, wheezing till he drowned out the distant lava rumbles. "Whoof! Hold it there, you! Not so like a God-forgotten horse race, if you please... Ah. If the fish are not so great for you, why not let the Fleet have the Achan waters?"

It was, he knew, not a true question: only a stimulus. Trolwen delivered himself of several explosive obscenities before answering, "They attacked us the moment we came home this spring. They had already occupied our coastlands! And even had they not done so, would you let a powerful horde of... strangers whose very habits are alien and evil... would you let them dwell at your windowsill? How long could such an arrangement last?"

Van Rijn nodded again. Just suppose a nation with tyrant government and filthy personal lives were to ask for the Moon, on the grounds that they needed it and it was not of large value to Earth—

Personally, he could afford to be tolerant. In many ways, the Drak'honai were closer to the human norm than the Lannachska. Their master-serf culture was a natural consequence of economics: given only neolithic tools, a raft big enough to support several families represented an enormous capital investment. It was simply not possible for disgruntled individuals to strike out on their own; they were at the mercy of the State. In such cases, power always concentrates in the hands of aristocratic warriors and intellectual priesthoods; among the Drak'honai, those two classes had merged into one.

The Lannachska, on the other hand—more typically Diomedean—were primarily hunters. They had very few highly specialized craftsmen; the individual could survive using tools made by himself. The low calorie/area factor of a hunting economy made them spread out thin over a large region, each small group nearly independent of the rest. They exerted themselves in spasms, during the chase for instance; but they did not have to toil day after day until they nearly dropped, as the common netman or oarsman or deckhand must in the Fleet—hence there was no economic justification on Lannach for a class of bosses and overseers.

Thus, their natural political unit was the little matrilineal clan. Such semiformal blood groups, almost free of government, were rather loosely organized into the Great Flock. And the Flock's *raison d'être*—apart from minor inter-sept business at home—was simply to increase the safety of all when every Diomedean on Lannach flew south for the winter.

Or came home to war!

"It is interesting," murmured Van Rijn, half in Anglic. "Among our peoples, like on most planets, only the agriculture folk got civilized. Here they make no farms at all: the big half-wild hornbeast herds is closest thing, *nie?* You hunt, berrypick, reap wild grain, fish a little—yet some of you know writing and make books; I see you have machines and houses, and weave cloth. Could be, the every-year stimulus of meeting foreigners in the tropics gives you ideas?"

"What?" asked Trolwen vaguely.

"Nothings. I just wondered, me, why—since life here is easy enough so you have time for making civilization—you do not grow so many you eat up all your game and chop down all your woods. That is what we called a successful civilization back on Earth."

"Our numbers do not increase fast," said Trolwen. "About three hundred years ago, a daughter Flock was formed and moved elsewhere, but the increase is very slow. We lose so many on the migrations, you see—storm,

exhaustion, sickness, barbarian attack, wild animals, sometimes cold or famine—" He hunched his wings, the Diomedean equivalent of a shrug.

"Ah-ha! Natural selection. Which is all well and good, if nature is obliging to pick you for survival. Otherwise gives awful noises about tragedy." Van Rijn stroked his goatee. The chins beneath it were getting bristly as his last application of antibeard enzyme wore off. "So. It does give one notion of what made your race get brains. Hibernate or migrate! And if you migrate, then be smart enough to meet all kinds trouble, by damn."

He resumed his noisy walk up the trail. "But we got our troubles of now to think about, especially since they are too the troubles belonging with Nicholas van Rijn. Which is not to be stood. Hmpf! Well, now, tell me more. I gather the Fleet scrubbed its decks with you and kicked you up here where the only flat country is the map. You want home to the lowlands again. You also want to get rid of the Fleet."

"We gave them a good fight," said Trolwen stiffly. "We still can—and will, by my grandmother's ghost! There were reasons why we were defeated so badly. We came tired and hungry back from ten-days of flight; one is always weak at the end of the springtime journey home. Our strongholds had already been occupied. The Draka flamethrowers set afire such other defenses as we contrived, and made it impossible for us to fight them on the water, where their real strength lies."

His teeth snapped together in a carnivore reflex. "And we have to overcome them soon! If we don't we are finished. And they know it!"

"I am not clear over this yet," admitted Van Rijn. "The hurry is that all your young are born the same time, *nie?*"

"Yes." Trolwen topped the rise and waited beneath the walls of Salmenbrok for his puffing guest.

Like all Lannachska settlements, it was fortified against enemies, animal or intelligent. There was no stockade—that would be pointless here where all the higher life-forms had wings. An average building was roughly in the shape of an ancient Terrestrial blockhouse. The ground floor was doorless and had mere slits for windows; entrance was through an upper story or a trap in the thatched roof. A hamlet was fortified not by outer walls but by being woven together with covered bridges and underground passages.

Up here, above timberline, the houses were of undressed stone mortared in place, rather than the logs more common among the valley clans. But this thorp was solidly made, furnished with a degree of comfort that indicated how bountiful the lowlands must be.

Van Rijn took time to admire such features as wooden locks constructed like Chinese puzzles, a wooden lathe set with a cutting edge of painstakingly fractured diamond, and a wooden saw whose teeth were of renewable volcanic glass. A communal windmill ground nuts and wild grain, as well as powering numerous smaller machines; it included a pump which filled a great stone basin in the overhanging cliff with water, and the water could be let down again to keep the mill turning when there was no wind. He even saw a tiny sail-propelled railroad, with wooden-wheeled basketwork carts running on iron-hard wooden rails. It carried flint and obsidian from the local quarries, timber from the forests, dried fish from the coast, furs and herbs from the lowlands, handicrafts from all the island. Van Rijn was delighted.

"So!" he said. "Commerce! Yea-are fundamentally capitalists. Ha, by damn, I think soon we do some business!"

Trolwen shrugged. "There is nearly always a strong wind up here. Why should we not let it take our burdens? Actually, all the apparatus you see took many lifetimes to complete—we're not like those Drakska, wearing themselves out with labor."

Salmenbrok's temporary population crowded about the human, with mumbling and twittering and wing-flapping, the cubs twisting around his legs and their mothers shrieking at them to come back. "Ten thousand purple devils!" he choked. "They think maybe I am a politician to kiss their brats, ha?"

"Come this way," said Trolwen. "Toward the Males' Temple—females and young may not follow, they have their own." He led the way along another path, making an elaborate salute to a small idol in a niche on the trail. From its crudity, the thing had been carved centuries ago. The Flock seemed to have only a rather incoherent polytheism for religion, and not to take that very seriously these days; but it was as strict about ritual and tradition as some classic British regiment—which, in many ways, it resembled.

Van Rijn trudged after, casting a glance behind. The females here looked little different from those in the Fleet: a bit smaller and slimmer than the males, their wings larger but without a fully developed spur. In fact, racially the two folk seemed identical.

And yet, if all that the company's agents had learned about Diomedes was not pure gibberish, the Drak'honai represented a biological monstrousness. An impossibility!

Trolwen followed the man's curious gaze, and sighed. "You can notice nearly half our nubile females are expecting their next cub."

"Hm-m-m. *Ja*, there is your problem. Let me see if I understand it right. Your young are all born at the fall equinox—"

"Yes. Within a few days of each other; the exceptions are negligible."

"But it is not so many ten-days thereafter you must leave for the south. Surely a new baby cannot fly?"

"Oh, no. It clings to the mother all the way; it is born with arms able to grasp hard. There is no cub from the preceding year; a nursing female does not get pregnant. Her two-year-old is strong enough to fly the distance, given rest periods in which it rides on someone's back—though that's the age group where we suffer the most loss. Three-year-olds and above need only be guided and guarded: their wings are quite adequate."

"But this makes much trouble for the mother, not so?"

"She is assisted by the half-grown clan members, or the old who are past childbearing but not yet too old to survive the journey. And the males, of course, do all the hunting, scouting, fighting, and so forth."

"So. You come to the south. I hear told it makes easy to live there, nuts and fruits and fish to scoop from the water. Why do you come back?"

"This is our home," said Trolwen simply.

After a moment: "And, of course, the tropic islands could never support all the myriads which gather there each midwinter—twice a year, actually. By the time the migrants are ready to leave, they have eaten that country bare."

"I see. Well, keep on. In the south, at solstice time, is when you rut."

"Yes. The desire comes on us—but you know what I mean."

"Of course," said Van Rijn blandly.

"And there are festivals, and trading with the other tribes... frolic or fight—" The Lannacha sighed. "Enough. Soon after solstice, we return, arriving here sometime before equinox, when the large animals on which we chiefly depend have awoken from their winter sleep and put on a little flesh. There you have the pattern of our lives, Eart'ho."

"It sounds like fun, if I was not too old and fat." Van Rijn blew his nose lugubriously. "Do not get old, Trolwen. It is so lonesome. You are lucky, dying on migration when you grow feeble, you do not live wheezy and helpless with nothing but your dear memories, like me."

"I'm not likely to get old as matters stand now," said Trolwen.

"When your young are born, all at once in the fall, *ja*," mused Van Rijn, "I can see how then is time for nothing much but obstetrics. And if you have not food and shelter and such helps all ready, most of the young die—"

"They are replaceable." said Trolwen, with a degree of casualness that showed he was, after all, not just a man winged and tailed. His tone sharpened. "But the females who bear them are more vital to our strength. A recent mother must be properly rested and fed, you understand, or she will never reach the south—and consider what a part of our total numbers are going to become mothers. It's a question of the Flock's survival as a nation! And those filthy Drakska, breeding all the year round like... like fish... *Nó!*"

"No indeed," said Van Rijn. "Best we think of somethings very fast, or I grow very hungry, too."

"I spent lives to rescue you," said Trolwen, "because we all hoped you would think of something yourself."

"Well," said Van Rijn, "the problem is to get word to my own people at Thursday Landing. Then they come here quick, by damn, and I will tell them to clean up on the Fleet."

Trolwen smiled. Even allowing for the unhuman shape of his mouth, it was a smile without warmth or humor. "No, no," he said. "Not that easily. I dare not, cannot spare the folk, or the time and effort, in some crazy attempt to cross The Ocean... not while Drak'ho has us by the throat. Also—forgive me—how do I know that you will be interested in helping us, once you are able to go home again?"

He looked away from his companion, toward the porticoed cave that was the Males' Temple. Steam rolled from its mouth, there was the hiss of a geyser within.

"I myself might have decided otherwise," he added abruptly, in a very low voice. "But I have only limited powers—any plan of mine—the Council—do you see? The Council is suspicious of three wingless monsters. It thinks... we know so little about you... our only sure hold on you is your own desperation... the Council will allow no help to be brought for you until the war is over."

Van Rijn lifted his shoulders and spread his hands. "Confidential, Trolwen, boy, in their place I would do the same."

## X.

NOW DARKNESS waned. Soon there would be light nights, when the sun hovered just under the sea and the sky was like white blossoms. Already both moons could be seen in full phase after sunset. As Rodonis stepped from her cabin, swift Sk'huanax climbed the horizon and swung up among the many stars toward slow and patient Lykaris. Between them, She Who Waits and He Who Pursues cast a shuddering double bridge over broad waters.

Rodonis was born to the old nobility, and had been taught to smile at Moons worship. Good enough for the common sailors, who would otherwise go back to their primitive bloody sacrifices to Aeak'ha-in-the-Deeps, but really, an educated person knew there was only the Lodestar... Nevertheless, Rodonis went down on the deck, hooded herself with her wings, and whispered her trouble to bright mother Lykaris.

"A song do I pledge you, a song all for yourself, to be made by the Fleet's finest bards and sung in your honor when next you hold wedding with He Who Pursues you. You will not wed Him again for more than a year, the astrologues tell me; there will be time enough to fashion a song for you which shall live while the Fleet remains afloat, O Lykaris: if but you will spare me my Delp."

She did not address Sk'huanax the Warrior, any more than a male Drak'ho would have dreamed of petitioning the Mother. But she said to Lykaris in her mind, that there could be no harm in calling to his attention the fact the Delp was a brave person who had never omitted the proper offerings.

The moons brightened. A bank of cloud in the west bulked like frosty mountains. Far off stood the ragged loom of an island, and she could hear pack ice cough in the north. It was a big strange seascape; this was not the dear

green Southwater whence starvation had driven the Fleet, and she wondered if Achan's gods would ever let the Drak'honai call it home.

The *lap-lap* of waves, creaking timbers, cables that sang as the dew taunted them, wind-mumble in shrouds, a slating sail, the remote plaintiveness of a flute and the nearer homely noises from this raft's own forecabin, snores and cub-whimpers and some couple's satisfied grunt—were a strong steady comfort in this cold emptiness named Achan Sea. She thought of her own young, two small furry shapes in a richly tapestried bed, and it gave her the remaining strength needed. She spread her wings and mounted the air.

From above, the Fleet at night was all clumps of shadow, with the rare twinkle of firepots where some crew worked late. Most were long abed, worn out from a day of dragging nets, manning sweeps and capstans, cleaning and salting and pickling the catch, furling and unfurling the heavy sails of the rafts, harvesting driss and fruitweed, felling trees and shaping timber with stone tools. A common crew member, male or female, had little in life except hard brutal labor. Their recreations were almost as coarse and violent: the dances, the athletic contests, the endless lovemaking, the bawdy songs roared out from full lungs over a barrel of sea-grain beer.

For a moment, as such thoughts crossed her mind, Rodonis felt pride in her crewfolk. To the average noble, a commoner was a domestic animal, ill-mannered, unlettered, not quite decent, to be kept in line by whip and hook for his own good. But flying over the great sleeping beast of a Fleet, Rodonis sensed its sheer vigor, coiled like a snake beneath her—these were the lords of the sea, and Drak'ho's haughty banners were raised on the backs of Drak'ho's lusty deckhands.

Perhaps it was simply that her own husband's ancestors had risen from the forecabin not many generations back. She had seen him help his crew often enough, working side by side with them in storm or fish run; she had learned it was no disgrace to swing a quernstone or set up a massive loom for herself.

If labor was pleasing to the Lodestar, as the holy books said, then why should Drak'ho nobles consider it distasteful? There was something bloodless about the old families, something not quite healthy. They died out, to be replaced from below, century after century. It was well-known that deckhands had the most offspring, skilled handcrafters and full-time warriors rather less, hereditary officers fewest of all. Why, Admiral Syranax had in a long life begotten only one son and two daughters. She, Rodonis, had two cubs already, after a mere four years of marriage.

Did this not suggest that the high Lodestar favored the honest person working with honest hands?

But no... those Lannach'honai all had young every other year, like machinery, even though many of the tykes died on migration. And the Lannach'honai did not work, not really; they hunted, herded, fished with their effeminate hooks, they were vigorous enough but they never stuck to a job through hours and days like a Drak'ho sailor... and, of course, their habits were just disgusting. *Animal!* A couple of tendays a year, down in the twilight of equatorial solstice, indiscriminate lust, and that was all. For the rest of your life, the father of your cub was only another male to you—not that you knew who he was anyway, you hussy!—and at home there was no modesty between the sexes, there wasn't even much distinction in everyday habits, because there was no more desire. Ugh!

Still, those filthy Lannach'honai had flourished, so maybe the Lodestar did not care... No, it was too cold a thought, here in the night wind under ashen Sk'huanax. Surely the Lodestar had appointed the Fleet an instrument, to destroy those Lannach beasts and take the country they had been defiling.

Rodonis' wings beat a little faster. The flagship was close now, its turrets like mountain peaks in the dark. There were many lamps burning, down on deck or in shuttered rooms. There were warriors cruising endlessly above and around. The admiral's flag was still at the masthead, so he had not yet died; but the death watch thickened hour by hour.

*Like carrion birds waiting*, thought Rodonis with a shudder.

One of the sentries whistled her to a hover and flapped close. Moonlight glistened on his polished spearhead. "Hold! Who are you?"

She had come prepared for such a halt, but briefly, the tongue clove to her mouth. For she was only a female, and a monster laired beneath her.

A gust of wind rattled the dried things hung from a yardarm: the wings of some offending sailor who now sat leashed to an oar or a millstone, if he still lived. Rodonis thought of Delp's back bearing red stumps, and her anger broke loose in a scream:

"Do you speak in that tone to a sa Axollon?"

The warrior did not know her personally, among the thousands of Fleet citizens, but he knew an officer-class scarf; and it was plain to see that a life's toil had never been allowed to twist this slim-flanked body.

"Down on the deck, scum!" yelled Rodonis. "Cover your eyes when you address me!"

"I... my lady," he stammered, "I did not—"

She dove directly at him. He had no choice but to get out of the way. Her voice cracked whip-fashion, trailing her. "Assuming, of course, that your boatswain has first obtained my permission for you to speak to me."

"But... but... but—" Other fighting males had come now, to wheel as helplessly in the air. Such laws did exist; no one had enforced them to the letter for centuries, but—

An officer on the main deck met the situation when Rodonis landed. "My lady," he said with due deference, "it is not seemly for an unescorted female to be abroad at all, far less to visit this raft of sorrow."

"It is necessary," she told him. "I have a word for Captain T'heonax which will not wait."

"The captain is at his honored father's bunkside, my lady. I dare not—"

"Let it be your teeth he has pulled, then, when he learns that Rodonis sa Axollon could have forestalled another mutiny!"

She flounced across the deck and leaned on the rail, as if brooding her anger above the sea. The officer gasped. It was like a tail-blow to the stomach. "My lady! At once... wait, wait here, only the littlest of moments... Guard! Guard, there! Watch over my lady. See that she lacks not." He scuttled off.

Rodonis waited. Now the real test was coming.

There had been no problem so far. The Fleet was too shaken; no officer, worried ill, would have refused her demand when she spoke of a second uprising.

The first had been bad enough. Such a horror, an actual revolt against the Lodestar's own Oracle, had been unknown for more than a hundred years... and with a war to fight at the same time! The general impulse had been to deny that anything serious had happened at all. A regrettable misunderstanding; Delp's folk misled, fighting their gallant, hopeless fight out of loyalty to their captain... after all, you couldn't expect ordinary sailors to understand the more modern principle, that the Fleet and its admiral transcended any individual raft—

Harshly, her tears at the time only a dry memory, Rodonis rehearsed her interview with Syranax, days ago.

"I am sorry, my lady," he had said. "Believe me I am sorry. Your husband was provoked, and he had more justice on his side than T'heonax. In fact, I know it was just a fight which happened, not planned, only a chance spark touching off old grudges, and my own son mostly to blame."

"Then let your son suffer for it!" she had cried.

The gaunt old skull wove back and forth, implacably. "No. He may not be the finest person in the world, but he is my son. And the heir. I haven't long to live, and wartime is no time to risk a struggle over the succession. For the Fleet's sake, T'heonax must succeed me without argument from anyone; and for this, he must have an officially unstained record."

"But why can't you let Delp go too?"

"By the Lodestar, if I could! But it's not possible. I can give everyone else amnesty, yes, and I will. But there must be one to bear the blame, one on whom to vent the pain of our hurts. Delp has to be accused of engineering a mutiny, and be punished, so that everybody else can say, 'Well, we fought each other, but it was all his fault, so now we can trust each other again.'"

The admiral sighed, a tired breath out of shrunken lungs. "I wish to the Lodestar I didn't have to do this. I wish... I'm fond of you too, my lady. I wish we could be friends again."

"We can," she whispered, "if you will set Delp free."

The conqueror of Maion looked bleakly at her and said: "No. And now I have heard enough."

She had left his presence.

And the days passed, and there was the farcical nightmare of Delp's trial, and the nightmare of the sentence passed on him, and the nightmare of waiting for its execution. The Lannach'ho raid had been like a moment's waking from fever-dreams: for it was sharp and real, and your shipmate was no longer your furtive-eyed enemy but a warrior who met the barbarian in the clouds and whipped him home from your cubs!

Three nights afterward, Admiral Syranax lay dying. Had he not fallen sick, Delp would now be a mutilated slave, but in this renewed tension and uncertainty, so controversial a sentence was naturally stayed.

Once T'heonax had the Admiralty, thought Rodonis in a cold corner of her brain, there would be no more delay. Unless—

"Will my lady come this way?"

They were obsequious, the officers who guided her across the deck and into the great gloomy pile of logs. Household servants, pattering up and down window-less corridors by lamplight, stared at her in a kind of terror. Somehow, the most secret things were always known to the forecastle, immediately, as if smelled.

It was dark in here, stuffy, and silent. *So* silent. The sea is never still. Only now did Rodonis realize that she had not before, in all her life, been shut away from the sound of waves and timber, and cordage. Her wings tensed, she wanted to fly up with a scream.

She walked.

They opened a door for her; she went through, and it closed behind her with sound-deadening massiveness. She saw a small, richly furred and carpeted room, where many lamps burned. The air was so thick it made her dizzy. T'heonax lay on a couch watching her, playing with one of the Eart'ho knives. There was no one else.

"Sit down," he said.

She squatted on her tail, eyes smoldering into his as if they were equals.

"What did you wish to say?" he asked tonelessly.

"The admiral, your father lives?" she countered.

"Not for long, I fear," he said. "Aeak'ha will eat him before noon." His eyes went toward the arras, haunted. "How long the night is!"

Rodonis waited.

"Well?" he said. His head swung back, snakishly. There was a rawness in his tone. "You mentioned something about... another mutiny?"

Rodonis sat straight up on her haunches. Her crest grew stiff. "Yes," she replied in a winter voice. "My husband's crew have not forgotten him."

"Perhaps not," snapped T'heonax. "But they've had sufficient loyalty to the Admiralty drubbed into them by now."

"Loyalty to Admiral Syranax, yes," she told him. "But that was never lacking. You know as well as I, what happened was no mutiny... only a riot, by males who were against you. Syranax they have always admired, if not loved."

"The *real* mutiny will be against his murderer."

T'heonax leaped.

"What do you mean?" he shouted. "Who's a murderer?"

"You are." Rodonis pushed it out between her teeth. "You have poisoned your father."

She waited then, through a time which stretched close to breaking. She could not tell if the notoriously violent male she faced would kill her for uttering those words.

Almost, he did. He drew back from her when his knife touched her throat. His jaws clashed shut again, he leaped onto his couch and stood there on all fours with back arched, tail rigid and wings rising.

"Go on," he hissed. "Say your lies. I know well enough how you hate my whole family, because of that worthless husband of yours. All the Fleet knows. Do you expect them to believe your naked word?"

"I never hated your father," said Rodonis, not quite steadily; death had brushed very close. "He condemned Delp, yes. I thought he did wrongly, but he did it for the Fleet, and I... I am of officer kindred myself. You recall, on the day after the raid I asked him to dine with me, as a token to all that the Drak'honai must close ranks."

"So you did," sneered T'heonax. "A pretty gesture. I remember how hotly spiced all the guests said the food was. And the little keepsake you gave him, that shining disk from the Eart'ho possessions. Touching! As if it were yours to give. Everything of theirs belongs to the Admiralty."

"Well, the fat Eart'ho had given it to me himself," said Rodonis. She was deliberately leading the conversation into irrelevant channels, seeking to calm them both. "He had recovered it from his baggage, he said. He called it a *coin*... an article of trade among his people... thought I might like it to remember him by. That was just after the... the riot... and just before he and his companions were removed from the *Gerunis* to that other raft."

"It was a miser's gift," said T'heonax. "The disk was quite worn out of shape—Bah!" His muscles bunched again. "Come. Accuse me further, if you dare."

"I have not been altogether a fool," said Rodonis. "I have left letters, to be opened by certain friends if I do not return. But consider the facts, T'heonax. You are an ambitious male, and one of whom most persons are willing to think the worst. Your father's death will make you Admiral, the virtual owner of the Fleet—how long you must have chafed, waiting for this! Your father is dying, stricken by a malady unlike any known to our surgeons: not even like any known poison, so wildly does it destroy him. Now it is known to many that the raiders did not manage to carry off every bit of the Eart'ho food: three small packets were left behind. The Eart'honai frequently and publicly warned us against eating any of their rations. And *you* have had charge of all the Eart'ho things!"

T'heonax gasped.

"It's a lie!" he chattered. "I don't know... I haven't... I never... Will anyone believe I, anyone, could do such a thing... poison... to his own father?"

"Of you they will believe it," said Rodonis.

"I swear by the Lodestar—!"

"The Lodestar will not give luck to a Fleet commanded by a parricide. There will be mutiny on that account alone, T'heonax."

He glared at her, wild and panting. "What do you want?" he croaked.

Rodonis looked at him with the coldest gaze he had ever met. "I will burn those letters," she said, "and will keep silence forever. I will even join my denials to yours, should the same thoughts occur to someone else. But Delp must have immediate, total amnesty."

T'heonax bristled and snarled at her.

"I could fight you," he growled. "I could have you arrested for treasonable talk, and kill anyone who dared—"

"Perhaps," said Rodonis. "But is it worth it? You might split the Fleet open and leave us all a prey to the Lannach'honai. All I ask is my husband back."

"For that you would threaten to ruin the Fleet?"

"Yes," she said.

And after a moment: "You do not understand. You males make the nations and wars and songs and science, all the little things. You imagine you are the strong, practical sex. But a female goes again and yet again under death's shadow, to bring forth another life. We are the hard ones. We have to be."

T'heonax huddled back, shivering.

"Yes," he whispered at last, "yes, curse you, shrivel you, yes, you can have him. I'll give you an order now, this instant. Get his rotten feet off my raft before dawn, d'you hear? But I did not poison my father." His wings beat thunderous, until he lifted up under the ceiling and thrashed there, trapped and screaming. "I *didn't!*"

Rodonis waited.

Presently she took the written order, and left him, and went to the brig, where they cut the ropes that bound Delp hyr Orikan. He lay in her arms and sobbed. "I will keep my wings, I will keep my wings—"

Rodonis sa Axollon stroked his crest, murmured to him, crooned to him, told him all would be well now, they were going home again, and wept a little because she loved him.

Inwardly she held a chill memory, how old Van Rijn had given her the coin but warned her against... what had he said?... heavy metal poisoning. "To you, iron, copper, tin is unknown stuffs. I am not a chemist, me; chemists I hire when chemicking is needful; but I think better I eat a shovelful arsenic than one of your cubs try teething on this piece money, by damn!"

*And she remembered sitting up in the dark, with a stone in her hand, grinding and grinding the coin, until there was seasoning for the unbendable admiral's dinner.*

Afterward she recollected that the Eart'ho was not supposed to have such mastery of her language. It occurred to her now, like a shudder, that he could very well have left that deadly food behind on purpose, in hopes it might cause trouble. But how closely had he foreseen the event?

## XI.

GUNTRA OF THE Enklann sept came in through the door. Eric Wace looked wearily up. Behind him, hugely shadowed between rush lights, the mill was a mumble of toiling forms.

"Yes?" he sighed.

Guntra held out a broad shield, two meters long, a light sturdy construction of wicker on a wooden frame. For many ten-days she had supervised hundreds of females and cubs as they gathered and split and dried the reeds, formed the wood, wove the fabric, assembled the unit. She had not been so tired since homecoming. Nevertheless, a small victory dwelt in her voice: "This is the four thousandth, Councilor." It was not his title, but the Lannacha mind could hardly imagine anyone without definite rank inside the Flock organization. Considering the authority granted the wingless creatures, it fell most naturally to call them Councilors.

"Good." He hefted the object in hands grown calloused. "A strong piece of work. Four thousand are more than enough; your task is done, Guntra."

"Thank you." She looked curiously about the transformed mill. Hard to remember that not so long ago it had existed chiefly to grind food.

Angrek of the Trekkans came up with a block of wood in his grasp. "Councilor," he began, "I—" He stopped. His gaze had fallen on Guntra, who was still in her early middle years and had always been considered handsome.

Her eyes met his. A common smokiness lit them. His wings spread and he took a stiff step toward her.

With a gasp, almost a sob, Guntra turned and fled. Angrek stared after her, then threw his block to the floor and cursed.

"What the devil?" said Wace.

Angrek beat a fist into his palm. "Ghosts," he muttered. "It must be ghosts... unrestful spirits of all the evildoers who ever lived... possessing the Drakska, and now come to plague us!"

Another pair of bodies darkened the door, which stood open to the short pale night of early summer. Nicholas van Rijn and Tolk the Herald entered.

"How goes it, boy?" boomed Van Rijn. He was gnawing a nitro-packed onion; the gauntness which had settled on Wace, even on Sandra, had not touched him. But then, thought Wace bitterly, the old blubberbucket didn't work. All he did was stroll around and talk to the local bosses and complain that things weren't proceeding fast enough.

"Slowly, sir." The younger man bit back words he would rather have said. *You bloated leech, do you expect to be carried home by my labor and my brains, and job me off with another factor's post on another bell-planet?*

"It will have to be speeded, then," said Van Rijn. "We cannot wait so long, you and me."

Tolk glanced keenly at Angrek. The handicrafter was still trembling and whispering charms. "What's wrong?" he asked.

"The... an influence." Angrek covered his eyes. "Herald," he stammered, "Guntra of the Enklann was here just now, and for a moment we... we desired each other."

Tolk looked grave, but spoke without reproof. "It has happened to many. Keep it under control."

"But what *is* it, Herald? A sickness? A judgment? What have I done?"

"These unnatural impulses aren't unknown," said Tolk. "They crop up in most of us, every once in a while. But of course, one doesn't talk about it; one suppresses it, and does his or her best to forget it ever happened." He scowled. "Lately there has been more of such hankering than usual. I don't know why. Go back to your work and avoid females."

Angrek drew a shaky breath, picked up his piece of wood, and nudged Wace. "I wanted your advice; the shape here doesn't seem to me the best for its purpose—"

Tolk looked around. He had just come back from a prolonged journey, cruising over his entire homeland to bear word to scattered clans. "There has been much work done here," he said.

"Ja," nodded Van Rijn complacently. "He is a talented engineer, him my young friend. But then, the factor on a new planet had pest-be-damned better be a good engineer."

"I am not so well acquainted with the details of his schemes."

"My schemes," corrected Van Rijn, somewhat huffily. "I tell him to make us weapons. All he does then is make them."

"All?" asked Tolk dryly. He inspected a skeletal framework. "What's this?"

"A repeating dart-thrower; a machine gun, I call it. See, this walking beam turns this spurred fly wheel. Darts are fed to the wheel on a belt—s-s-so—and tossed off fast: two or three in an eye-wink, at least. The wheel is swivel-mounted to point in all directions. It is an old idea, really. I think Miller or de Camp or someone first built it long ago. But it is one hard damn thing to face in battle."

"Excellent," approved Tolk. "And that over there?"

"We call it a ballista. It is like the Drak'ho catapults, only more so. This throws large stones, to break down a wall or sink a boat. And here—*ja*." Van Rijn picked up the shield Guntra had brought. "This is not so good advertising copy, maybe, but I think it means a bit more for us than the other machineries. A warrior on the ground wears one on his back."

"Mm-m-m... yes, I see where a harness would fit it would stop missiles from above, eh? But our warrior could not fly while he wore it."

"Just so!" roared Van Rijn. "Just bloody-be-so! That is the troubles with you folk on Diomedes. Great balls of cheese! How you expect to fight a real war with nothing but all air forces, ha! Up here in Salmenbrok, I spend all days hammering into stupid officer heads, it is infantry takes and holds a position, by damn! And then officers have to beat it into the ranks, and practice them—gout of Judas! It is not time enough! In these few ten-days, I have to try make what needs years!"

Tolk nodded, almost casually. Even Trolwen had needed time and argument before he grasped the idea of a combat force whose main body was deliberately restricted to ground operations. It was too alien a concept. But the Herald said only: "Yes. I see your reasoning. It is the strong points which decide who holds Lannach, the fortified towns that dominate a countryside from which all the food comes. And to take the towns back, we will need to dig our way in."

"You think smartly," approved Van Rijn. "In Earth history, it took some peoples a long time to learn there is no victory in air power alone."

"There are still the Drak'ska fire weapons," said Tolk. "What do you plan to do about them? My whole mission, these past ten-days, has been largely to persuade the outlying septs to join us. I gave them your word that the fire could be faced, that we'd even have flame-throwers and bombs of our own. I'd better have been telling the truth."

He looked about. The mill, converted to a crude factory, was too full of winged laborers for him to see far. Nearby, a primitive lathe, somewhat improved by Wace, was turning out spearshafts and tomahawk handles. Another engine, a whirling grindstone, was new to him: it shaped ax heads and similar parts, not as good as the handmade type but formed in wholesale lots. A drop hammer knocked off flint and obsidian flakes for cutting edges; a circular saw cut wooden members; a rope-twisting machine spun faster than the eye could follow. All of it was belt-powered from the great millwheels—all of it ludicrously haywired and cranky—but it spat forth the stuff of war faster than Lannach could use, filled whole bins with surplus armament.

"It is remarkable," said Tolk. "It frightens me a little."

"I make a new way of life here," said Van Rijn expansively. "It is not this machine or that one which has already changed your history beyond changing back. It is the basic idea I have introduced: mass production."

"But the fire—"

"Wace has also begun to make us fire weapons. Sulfur they have gathered from Mount Oborch, and there are oil pools from which we are getting nice arsonish liquids. Distillation, that is another art the Drak'ho have had and you have not. Now we will have some Molotov cocktails for our own selves."

The human scowled. "But there is one thing true, my friend. We have not time to train your warriors like they should be to use this material. Soon I starve; soon your females get heavy and food must be stored." He heaved a pathetic sigh. "Though I am long dead before you folks have real sufferings."

"Not so," said Tolk grimly. "We have almost half a year left before Birthtime, true. But already we are weakened by hunger, cold, and despair. Already we have failed to perform many ceremonies—"

"Blast your ceremonies!" snapped Van Rijn. "I say it is Ulwen town we should take first, where it sits so nice overlooking Duna Brae that all the hornbeasts live at. If we have Ulwen, you have eats enough, also a strong point easy to defend. But no, Trolwen and the Council say we must strike straight for Mannenach, leaving Ulwen enemy-held in our rear, and going down clear to Sanga Bay where their rafts can get at us. For why? So you can hold some blue-befungused rite there!"

"You cannot understand," said Tolk gently. "We are too different. Even I, whose life's work it has been to deal with alien peoples, cannot grasp your attitude. But our life is the cycle of the year. It is not that we take the old gods so seriously any more—but their rituals, the tightness and decency of it all, the *belonging*—" He looked upward, into the shadow-hidden roof, where the wind hooted and rushed about the busy millwheels. "No, I don't believe that ancestral ghosts fly out there of nights. But I do believe that when I welcome High Summer back at the great rite in Mannenach, as all my forebears have done for as long as there has been a Flock... then I am keeping the Flock itself alive."

"Bah!" Van Rijn extended a dirt-encrusted hand to scratch the matted beard which was engulfing his face. He couldn't shave or wash: even given anti-allergen shots, human skin wouldn't tolerate Diomedean soap. "I tell you

why you have all this ritual. First, you are a slave to the seasons, more even than any farmer on Earth back in our old days. Second, you must fly so much, and leave your homes empty all the dark time up here, that ritual is your most precious possession. It is the only thing you have not weighing too much to be carried with you everywhere."

"That's as may be," said Tolk. "The fact remains. If there is any chance of greeting the Full Day from Mannenach Standing Stones, we shall take it. The extra lives which are lost because this may not be the soundest strategy, will be offered in gladness."

"If it does not cost us the whole befouled war." Van Rijn snorted. "Devils and dandruff! My own chaplain at home, that pickle face, is not so fussy about what is proper. Why, that poor young fellow there was near making suicide now, just because he got a little bit excited over a wench out of wenching season, *nie?*"

"It isn't done," said Tolk stiffly. He walked from the shop. After a moment, Van Rijn followed.

Wace settled the point of discussion with Angrek, checked operations elsewhere, swore at a wellmeaning young porter who was storing volatile petroleum fractions beside the hearth, and left. His feet were heavy at the end of his legs. It was too much for one man to do, organizing, designing, supervising, trouble-shooting—Van Rijn seemed to think it was routine to lift neolithic hunters into the machine age in a few weeks. He ought to try it himself! It might sweat some of the lard off the old hog.

The nights were so short now, only a paleness between two red clouds on a jagged horizon, that Wace no longer paid any heed to the time. He worked until he was ready to drop, slept a while, and went back to work.

Sometimes he wondered if he had ever felt rested and clean, and well fed, and comforted in his aloneness.

Morning smoldered on northerly ridges, where a line of volcanoes smeared wrathful black across the sun. Both moons were sinking, each a cold coppery disk twice the apparent size of Earth's Luna. Mount Oborch shivered along giant flanks and spat a few boulders at the pallid sky. The wind came galing, stiff as an iron bar pressed against Wace's suddenly chilled back. Salmenbrok village huddled flinty barren under its loud quick thrust.

He had reached the ladder made for him, so he could reach the tiny loft-room he used, when Sandra Tamarin came from behind the adjoining tower. She paused, one hand stealing to her face. He could not hear what she said, in the blustery air.

He went over to her. Gravel scrunched under the awkward leather boots a Lannacha tailor had made him. "I beg your pardon, my lady?"

"Oh... it was nothing, Freeman Wace." Her green gaze came up to meet his, steadily and proudly, but he saw a redness steal along her cheeks. "I only said good morning."

"Likewise." He rubbed sandy-lidded eyes. "I haven't seen you for some time, my lady. How are you?"

"Restless," she said. "Unhappy. Will you talk to me for a little, perhaps?"

They left the hamlet behind and followed a dim trail upward, through low harsh bushes breaking into purple bloom. High above them wheeled a few sentries, but those were only impersonal specks against heaven. Wace felt his heartbeat grow hasty.

"What have you been doing?" he asked.

"Nothing of value. What can I do?" She stared down at her hands. "I try, but I have not the skills, not like you the engineer or Freeman van Rijn."

"Him?" Wace shrugged. No doubt the old goat had found plenty of chance to brag himself up, as he lounged superfluous around Salmenbrok. "It—" He stopped, groping after words. "It's enough just to have my lady present."

"Why, Freeman!" She laughed, with genuine half-amused pleasure and no coyness at all. "I never thought you so gallant in the words."

"Never had much chance to be, my lady," he murmured, too tired and strength-emptied to keep up his guard.

"Not?" She gave him a sideways look. The wind laid its fingers in her tightly braided hair and unfurled small argent banners of it. She was not yet starved, but the bones in her face were standing out more sharply; there was a smudge on one cheek and her garments were clumsy baggings hurled together by a tailor who had never seen a human frame before. But somehow, stripped thus of queenliness, she seemed to him more beautiful than erstwhile—perhaps because of being closer? Because her poverty said with frankness that she was only human flesh like himself?

"No," he got out between stiff lips.

"I do not understand," she said.

"Your pardon, my lady. I was thinking out loud. Bad habit. But one does, on these outpost worlds. You see the same few men so often that they stop being company; you avoid them—and, of course, we're always undermanned, so you have to go out by yourself on various jobs, maybe for weeks at a time. Why am I saying all this? I don't know. Dear God, how tired I am!"

They paused on a ridge. At their feet there was a cliff tumbling through hundreds of meters down to a foam-white river. Across the canyon were mountains and mountains, their snows tinged bloody by the sun. The wind came streaking up the dales and struck the humans in the face.

"I see. Yes, it clears for me." Sandra regarded him with grave eyes. "You have had to work hard all your life. There has not been time for the pleasures, the learned manners and culture. Not?"

"No time at all, my lady," he said "I was born in the slums, one kilometer from the old Triton Docks. Nobody but the very poor would live that close to a spaceport, the traffic and stinks and earthquake noise... though you got used to it, still it was a part of you, built into your bones. Half my playmates are now dead or in jail, I imagine, and

the other half are scrabbling for the occasional half-skilled hard-and-dirty job no one else wants. Don't pity me, though. I was lucky. I got apprenticed to a fur wholesaler when I was twelve. After two years, I'd made enough contacts to get a hard-and-dirty job myself—only this was on a spaceship, fur-trapping expedition to Rhiannon. I taught myself a little something in odd moments, and bluffed about the rest I was supposed to know, and got a slightly better job. And so on and so on, till they put me in charge of this outpost... a very minor enterprise, which may in time become moderately profitable but will never be important. But it's a stepping stone. So here I am, on a mountain top with all Diomedes below me, and what's next?"

He shook his head, violently, wondering why his reserve had broken down. Being so exhausted was like a drunkenness. But more to it than that... no, he was *not* fishing for sympathy... down underneath, did he want to find out if she would understand? If she could?

"You will get back," she said quietly. "Your kind of man survives."

"Maybe!"

"It is heroic, what you have done already." She looked away from him, toward the driving clouds around Oborch's peak. "I am not certain anything can stop you. Except yourself."

"I?" He was beginning to be embarrassed now, and wanted to talk of other things. He plucked at his bristly red beard.

"Yes. Who else can? You have come so far, so fast. But why not stop? Soon, perhaps here on this mountain, must you not ask yourself how much farther it is worth going?"

"I don't know. As far as possible, I guess."

"Why? Is it necessary to become great? Is it not enough to be free? With your talent and experience, you can make good-enough monies on many settled planets where men are more at home than here. Like Hermes, *exemplia*. In this striving to be rich and powerful, is it not merely that you want to feed and shelter the little boy who once cried himself hungry to sleep back in Triton Docks? But that little boy you can never comfort, my friend. He died long ago."

"Well... I don't know... I suppose one day I'll have a family. I'd want to give my wife more than just a living; I'd want to leave my children and grandchildren enough resources to go on—to stand off the whole world if they have to—"

"Yes. So. I think maybe—" he saw, before she turned her head from him, how the blood flew up into her face—"the old fighting Dukes of Hermes were like so. It would be well if we had a breed of men like them again—" Suddenly she began walking very fast down the path. "Enough. Best we return, not?"

He followed her, little aware of the ground he trod.

## XII.

WHEN THE LANNACHSKA were ready to fight, they were called to Salmenbrok by Tolk's Whistlers until the sky darkened with their wings. Then Trolwen made his way through a seethe of warriors to Van Rijn.

"Surely the gods are weary of us," he said bitterly. "Near always, at this time of year, there are strong south winds." He gestured at a breathless heaven. "Do you know a spell for raising dead breezes?"

The merchant looked up, somewhat annoyed. He was seated at a table outside the wattle-and-clay hut they had built for him beyond the village—for he refused to climb ladders, or sleep in a damp cave—dicing with Corps Captain Srygen for the beryl-like gemstones which were a local medium of exchange. The number of species in the galaxy which have independently invented some form of African golf is beyond estimation.

"Well," he snapped, "and why must you have your tail fanned?... Ah, seven! No, pox and pills, I remember, here seven is not a so good number. Well, we try again." The three cubes clicked in his hand and across the table. "Hm-m-m, seven again." He scooped up the stakes. "Double or nothings?"

"The ghost-eaters take it!" Srygen got up. "You've been winning too motherless often for my taste."

Van Rijn surged to his own feet like a broaching whale. "By damn, you take that back or—"

"I said nothing challengeable," Srygen told him coldly.

"You implied it. I am insulted, myself!"

"Hold on there," growled Trolwen. "What do you think this is, a beer feast? Eart'ho, all the fighting forces of Lannach are now gathered on these hills. We cannot feed them here very long. And yet, with the new weapons loaded on the railway cars, we cannot stir until there is a south wind. What to do?"

Van Rijn glared at Srygen. "I said I was insulted. I do not think so good when I am insulted."

"I am sure the captain will apologize for any unintended offense," said Trolwen, with a red-shot look at them both.

"Indeed," said Srygen. He spoke it like pulling teeth.

"So." Van Rijn stroked his beard. "Then to prove you make no doubt about my honesties, we throw once more, *nie?* Double or nothings."

Srygen snatched the dice and hurled them. "Ah, a six you have," said Van Rijn. "It is not so easy to beat. I am afraid I have already lost. It is not so simple to be a poor tired hungry old man, far away from his home and from the Siamese cats who are all he has to love him for himself, not just his monies... Tumte-tum-te-tum... Eight! A two, a three, a three! Well, well, well!"

"Transport," said Trolwen, hanging on to his temper by a hair. "The new weapons are too heavy for our porters. They have to go by rail. Without a wind, how do we get them down to Sagna Bay?"

"Simple," said Van Rijn, counting his take. "Till you get a good wind, tie ropes to the cars and all these so-husky young fellows pull."

Srygen blew up. "A free clan male, to drag a car like a... like a *Draka*?" He mastered himself and choked: "It isn't done."

"Sometimes," said Van Rijn, "these things must be done." He scooped up the jewels, dropped them into a purse, and went over to a well. "Surely you have some disciplines in this Flock."

"Oh... yes... I suppose so..." Trolwen's unhappy gaze went down-slope to the brawling, shouting winged tide which had engulfed the village. "But sustained labor like that has always... long before the Drakska came... always been considered—perverted, in a way—it is not exactly forbidden, but one does not do it without the most compelling necessity. To labor *in public*... No!"

Van Rijn hauled on the windlass. "Why not? The Drak'honai, them, make all kinds tiresome preachments about the dignity of labor. For them it is needful; in their way of life, one must work hard. But for you? Why must one *not* work hard in Lannach?"

"It isn't right," said Srygen stiffly. "It makes us like some kind of animal."

Van Rijn pulled the bucket to the well coping and took a bottle of Earthside beer from it. "Ahhh, good and cold... hm-m-m, possibly too cold, damn all places without thermostatted coolers—" He opened the bottle on the stone curb and tasted. "It will do. Now, I have made travels, and I find that everywhere the manners and morals of peoples have some good reason at bottom. Maybe the race has forgotten why was a rule made in the first place, but if the rule does not make some sense, it will not last many centuries. Follows then that you do not like prolonged hard work, except to be sure migration, because it is not good for you for some reason. And yet it does not hurt the Drak'honai too much. Paradox!"

"Unlawfulness take your wonderings," snarled Trolwen. "It was your idea that we make all this new-fangled apparatus, instead of fighting as our males have always fought. Now, how do we get it down to the lowlands without demoralizing the army?"

"Oh, that!" Van Rijn shrugged. "You have sports—contests—*nie*?"

"Of course."

"Well, you explain these cars must be brought with us and, while it is not necessary we leave at once—"

"But it is! We'll starve if we don't!"

"My good young friend," said Van Rijn patiently, "I see plain you have much to learn about politics. You Lannachska do not understand lying, I suppose because you do not get married. You tell the warriors, I say, that we can wait for a south wind all right but you know they are eager to come to grips with the foe and therefore they will be invited to play a small game. Each clan will pull so and so many cars down, and we time how fast it goes and make a prize for the best pullers."

"Well, I'll be accursed," said Srygen.

Trolwen nodded eagerly. "It's just the sort of thing that gets into clan traditions—"

"You see," explained Van Rijn, "it is what we call semantics on Earth. I am old and short with breath, so I can look unprejudiced at all these footballs and baseballs and potato races, and I know that a game is hard work you are not required to do."

He belched, opened another bottle, and took a half-eaten salami from his purse. The supplies weren't going to last very much longer.

### XIII.

WHEN THE EXPEDITION was halfway down the Misty Mountains, their wind rose behind them. A hundred warriors harnessed to each railway car relaxed and waited for the timers whose hourglasses would determine the winning team.

"But they are not all so dim in the brain, surely," said Sandra.

"Oh, no," answered Wace. "But those who were smart enough to see through Old Nick's scheme were also smart enough to see it was necessary, and keep quiet."

He huddled in a mordant blast that drove down alpine slopes to the distant cloudy green of hills and valleys, and watched the engineers at work. A train consisted of about thirty light little cars roped together, with a "locomotive" at the head and another in the middle. These were somewhat more sturdily built, to support two high masts with square sails. Given wood of almost metallic hardness, plus an oildrip over the wheels in lieu of ball bearings, plus the hurricane thrust of Diomedean winds, the system became practical. You didn't get up much speed, and you must often wait for a following wind, but this was not a culture bound to hourly schedules.

"It's not too late for you to go back, my lady," said Wace. "I can arrange an escort."

"No." She laid a hand on the bow which had been made for her—no toy, a 25-kilo killing tool such as she had often hunted with in her home forests. Her head lifted, the silverpale hair caught chill ruddy sunlight and threw back a glow to this dark immensity of cliffs and glaciers. "Here we all stand or we all die. It would not be right for a ruler born to stay home."

Van Rijn hawked. "Trouble with aristocrats," he muttered. "Bred for looks and courage, not brains. Now I would go back, if not needed here to show I have confidence in my own plans."

"Do you?" asked Wace skeptically.

"Let be with foolishness," snorted Van Rijn. "Of course not." He trudged back to the staff car which had been prepared for him: at least it had walls, a roof, and a bunk. The wind shrieked down ringing stony canyons, he leaned against it with all his weight. Overhead swooped and soared the squadrons of Lannach.

Wace and Sandra each had a private car, but she asked him to ride down with her. "Forgive me if I make dramatics, Eric, but we may be killed and it is lonely to die without a human hand to hold." She laughed, a little breathlessly. "Or at least we can talk."

"I'm afraid—" He cleared a tightened throat. "I'm afraid, my lady, I can't converse as readily as... Freeman Van Rijn."

"Oh," she grinned, "that was what I meant. I said *we* can talk, not him only."

Nevertheless, when the trains got into motion, she grew as quiet as he.

Lacking their watches they could scarcely even guess how long the trip took. High summer had almost come to Lannach; once in twelve and a half hours, the sun scraped the horizon north of west, but there was no more real night. Wace watched the kilometers click away beneath him; he ate, slept, spoke desultorily with Sandra or with young Angrek who served as her aide, and the great land flattened into rolling valleys and forests of low fringed trees, and the sea came near.

Now and again a hotbox or a contrary wind delayed the caravan. There was restlessness in the ranks: they were used to streaking in a day from the mountains to the coast, not to wheeling above this inchworm or a railway. Drak'honai scouts spied them from afar, inevitably, and a detachment of rafts lumbered into Sagna Bay with powerful reinforcements. Raids probed the flanks of the attackers. And still the trains must crawl.

In point of fact, there were eight Diomedean revolutions between the departure from Salmenbrok and the Battle of Mannenach.

The harbor town lay on the Sagna shore, well in from the open sea and sheltered by surrounding wooded hills. It was a gaunt grim-looking complex of stone towers, tightly knitted together with the usual tunnels and enclosed bridges, talking in the harsh tones of half a dozen big windmills. It overlooked a small pier, which the Drak'honai had been enlarging. Beyond, dark on the choppy brown waters, rocked two score enemy craft.

As his train halted, Wace jumped from Sandra's car. There was nothing to shoot at yet: Mannenach revealed only a few peaked roofs thrusting above the grassy ridge before him. Even against the wind, he could hear the thunder of wings as the Drak'honai lifted from the town, twisting upward in a single black mass like some tornado made flesh. But heaven was thick with Lannachska above him, and the enemy made no immediate attack.

His heart thumped, runaway, and his mouth was too dry for him to speak. Almost hazily, he saw Sandra beside him. A Diomedean bodyguard under Angrek closed around in a thornbush of spears.

The girl smiled. "This is a kind of relief," she said. "No more sitting and worrying, only to do what we can, not?"

"Not indeed!" puffed Van Rijn, stumping toward them. Like the other humans, he had arranged for an ill-fitting cuirass and helmet of laminated hard leather above the baggy malodorous native clothes. But he wore two sets of armor, one on top of the other, carried a shield on his left arm, had deputed two young warriors to hold another shield over him like a canopy, and bore a tomahawk and a beltful of stone daggers. "Not if I can get out of it, by damn! You go ahead and fight. I will be right behind you—as far behind as the good saints let."

Wace found his tongue and said maliciously: "I've often thought there might be fewer wars among civilized races, if they reverted to this primitive custom that the generals are present at the battles."

"Bah! Ridiculous! Just as many wars, only using generals who have guts more than brains. I think cowards make the best strategists, stands to reason, by damn. Now I stay in my car." Van Rijn stalked off, muttering.

Trolwen's newly-formed field artillery corps were going frantic, unloading their clumsy weapons from the trains and assembling them while squads and patrols skirmished overhead. Wace cursed—here was something he could do!—and hurried to the nearest confusion. "Hoy, there! Back away! What are you trying to do? Here, you, you, you, get up in the car and unlash the main frame... that piece *there*, you clothead!" After a while, he almost lost consciousness of the fighting that developed around him.

The Mannenach garrison and its sea-borne reinforcements had begun with cautious probing, a few squadrons at a time swooping to flurry briefly with some of the Lannachska flying troops and then pull away again toward the town. Drak'ho forces here were outnumbered by a fair margin; Trolwen had reasoned correctly that no admiral would dare leave the main Fleet without a strong defense while Lannach was still formidable. In addition, the sailors were puzzled, a little afraid, at the unprecedented attacking formations.

Fully half the Lannachska were ranked on the ground, covered by rooflike shields which would not even permit them to fly! Never in history had such a thing been known!

During an hour, the two hordes came more closely to grips. Much superior in the air, the Drak'honai punched time after time through Trolwen's fliers. But integrated by the Whistler corps, the aerial troops closed again, fluidly. And there was little profit in attacking the Lannachska infantry—those awkward wicker shields trapped edged missiles, sent stones rebounding, an assault from above was almost ignored.

Arrows were falling thickly when Wace had his last fieldpiece assembled. He nodded at a Whistler, who whirled up immediately to bear the word to Trolwen. From the commander's position, where he rode a thermal updraft,

came a burst of messengers—banners broke out on the ground, war whoops tore through the wind, it was the word to advance!

Ringed by Angrek's guards, Wace remained all too well aware that he was at the forefront of an army. Sandra went beside him, her lips untense. On either hand stretched spear-jagged lines of walking dragons. It seemed like a long time before they had mounted the ridge.

One by one, Drak'honai officers realized... and yelled their bafflement.

These stolid ground troops, unassailable from above, unopposed below, were simply pouring over the hill to Mannenach's walls, trundling their siege tools. When they arrived there, they got to work.

It became a gale of wings and weapons. The Drak'honai plunged, hacked and stabbed at Trolwen's infantry—and were in their turn attacked from above, as his fliers whom they had briefly dispersed resumed formation. Meanwhile, *crunch, crunch, crunch*, rams ate at Mannenach; detachments on foot went around the town and down toward the harbor.

"Over there! Hit 'em again!" Wace heard all at once that he was yelling.

Something broke through the chaos overhead. An arrow-filled body crashed to earth. A live one followed it, a Drak'ho warrior with the air pistol-cracking under his wings. He came low and fast; one of Angrek's lads thrust a sword at him, missed, and had his brains spattered by the sailor's tomahawk.

Without time to know what had happened, Wace saw the creature before him. He struck, wildly, with his own stone ax. A wing-buffet knocked him to the ground. He bounced up, spitting blood, as the Drak'ho came about and dove again. His hands were empty... Suddenly the Drak'ho screamed and clawed at an arrow in his throat, fluttered down and died.

Sandra nocked a fresh shaft. "I told you I would have some small use today," she said.

"I—" Wace reeled where he stood, looking at her.

"Go on," she said. "Help them break through. I will guard."

Her face was even paler than before, but there was a green in her eyes which burned.

He spun about and went back to directing his sappers. It was plain now that battering rams had been a mistake; they wouldn't get through mortared walls till Matthewsma's. He took everyone off the engines and put them to helping those who dug. With enough wooden shovels—or bare hands—they'd be sure to strike a tunnel soon.

From somewhere near, there lifted a clatter great enough to drown out the struggle around him. Wace jumped up on a ram's framework and looked over the heads of his engineers.

A body of Drak'honai had resorted to the ground themselves. They were not drilled in such tactics; but then, the Lannachska had had only the sketchiest training. By sheer sustained fury the Drak'honai were pushing their opponents back. From Trolwen's airy viewpoint, thought Wace, there must be an ugly dent in the line.

Where the devil were the machine guns?

Yes, here came one, bouncing along on a little cart. Two Lannachska began pumping the flywheel, a third aimed and operated the feed. Darts hosed across the Drak'honai. They broke up, took to the sky again. Wace hugged Sandra and danced her across the field.

Then hell boiled over on the roofs above him. His immediate corps had finally gotten to an underground passage and made it a way of entry. Driving the enemy before them, up to the top floors and out, they seized this one tower in a rush.

"Angrek!" panted Wace. "Get me up there!" Someone lowered a rope. He swarmed up it, with Sandra close behind. Standing on the ridgepole, he looked past stony parapets and turning millwheels, down to the bay. Trolwen's forces had taken the pier without much trouble. But they were getting no farther: a steady hail of fire-streams, oil bombs, and catapult missiles from the anchored rafts staved them off. Their own similar armament was outranged.

Sandra squinted against the wind, shifted north to lash her eyes to weeping, and pointed. "Eric—do you recognize that flag, on the largest of the vessels there?"

"Hm-m-m... let me see... yes, I do. Isn't that our old chum Delp's personal banner?"

"So, it is. I am not sorry he has escaped punishment for the riot we made. But I would rather have someone else to fight, it would be safer."

"Maybe," said Wace. "But there's work to do. We have our toe hold in the city. Now we'll have to beat down doors and push out the enemy—room by room—and you're staying here!"

"I am not!"

Wace jerked his thumb at Angrek. "Detail a squad to take the lady back to the trains," he snapped.

"No!" yelled Sandra.

"You're too late," grinned Wace. "I arranged for this before we ever left Salmenbrot."

She swore at him—then suddenly, softly, she leaned over and murmured beneath the wind and the warshrieks: "Come back hale, my friend."

He led his troopers into the tower.

Afterward he had no clear memory of the fight. It was a hard and bloody operation, ax and knife, tooth and fist, wing and tail, in narrow tunnels and cavelike rooms. He took blows, and gave them; once, for several minutes, he lay unconscious, and once he led a triumphant breakthrough into a wide assembly hall. He was not fanged, winged, or caudate himself, but he was heavier than any Diomedean, his blows seldom had to be repeated.

The Lannachska took Mannenach because they had—not training enough to make them good ground fighters—but enough to give them the *concept* of battle with immobilized wings. It was as revolting to Diomedean instincts as the idea of fighting with teeth alone, hands bound, would be to a human; unprepared for it, the Drak'honai bolted and ran ratlike down the tunnels in search of open sky.

Hours afterward, staggering with exhaustion, Wace climbed to a flat roof at the other end of town. Tolk sat there waiting for him.

"I think... we have... it all now," gasped the human.

"And yet not enough," said Tolk haggardly. "Look at the bay."

Wace grabbed the parapet to steady himself.

There was no more pier, no more sheds at the waterfront—it all stood in one black smoke. But the rafts and canoes of Drak'ho had edged into the shallows, forming a bridge to shore; and over this the sailors were dragging dismantled catapults and flamethrowers.

"They have too good a commander," said Tolk. "He has gotten the idea too fast, that our new methods have their own weaknesses."

"What is... Delp... going to do?" whispered Wace.

"Stay and see," suggested the Herald. "There is no way for us to help."

The Drak'honai were still superior in the air. Looking up toward a sky low and gloomy, rain clouds driving across angry gunmetal waters, Wace saw them moving to envelope the Lannacha air cover.

"You see," said Tolk, "it is true that their fliers cannot do much against our walkers—but the enemy chief has realized that the converse is also true."

Trolwen was too good a tactician himself to be cut up in such a fashion. Fighting every centimeter, his fliers retreated. After a while there was nothing in the sky but gray wrack.

Down on the ground, covered by arcing bombardment from the rafts, the sailors were setting up their mobile artillery. They had more of it than the Lannachska, and were better shots. A few infantry charges broke up in bloody ruin.

"Our machine guns they do not possess, of course," said Tolk. "But then, we do not have enough to make the difference."

Wace whirled on Angrek, who had joined him. "Don't stand here!" he cried. "Let's get down—rally our folk—seize those... It can be done, I tell you!"

"Theoretically, yes." Tolk nodded his lean head. "I can see where a person on the ground, taking advantage of every bit of cover, might squirm his way up to those catapults and flamethrowers, and tomahawk the operators. But in practice—well, we do not have such skill."

"Then what would you do?" groaned Wace.

"Let us first consider what will assuredly happen," said Tolk. "We have lost our trains; if not captured, they will be fired presently. Thus our supplies are gone. Our forces have been split, the fliers driven off, we groundlings left here. Trolwen cannot fight his way back to us, being outnumbered. We at Mannenach do outnumber our immediate opponents by quite a bit. But we cannot face their artillery."

"Therefore, to continue the fight, we must throw away all our big shields and other new-gangled items, and revert to conventional air tactics. But this infantry is not well equipped for normal combat: we have few archers, for instance. Delp need only shelter on the rafts, behind his fire weapons, and for all our greater numbers we'll be unable to touch him. Meanwhile he will have us pinned here, cut off from food and material. All the excess war goods your mill produced is valueless lying up in Salmenbrok. And there will certainly be strong reinforcements from the Fleet."

"To hell with that!" shouted Wace. "We have the town, don't we? We can hold it against them till they rot!"

"What can we eat while they are rotting?" said Tolk. "You are a good craftsman, Eart'a, but no student of war. The cold fact is, that Delp managed to split our forces, and therefore he has already won. I propose to cut our losses by retreating now, while we still can."

And then suddenly his manner broke, and he stooped and covered his eyes with his wings. Wace saw that the Herald was growing old.

#### XIV.

THERE WAS DANCING on the decks, and jubilant chants rang across Sagna Bay to the enfolding hills. Up and down and around, in and out, the feet and the wings interwove till timbers trembled. High in the rigging, a piper skirled their melody; down below, a great overseer's drum which set the pace of the oars now thuttered their stamping rhythm. In a ring of wing-folded bodies, sweat-gleaming fur and eyes aglisten, a sailor whirled his female while a hundred deep voices roared the song:

*"...A-sailing, a sailing,  
a-sailing to the Sea of Beer,  
fair lady, spread your sun-bright wings  
and sail with me!"*

Delp walked out on the poop and looked down at his folk.

"There'll be many a new soul in the Fleet, sixty ten-days hence," he laughed.

Rodonis held his hand, tightly. "I wish—" she began.

"Yes?"

"Sometimes... oh, it's nothing—" The dancing pair fluttered upward, and another couple sprang out to beat the deck in their place; planks groaned under one more huge ale barrel, rolled forth to celebrate victory. "Sometimes I wish we could be like them."

"And live in the forecastle?" said Delp dryly.

"Well, no... of course not—"

"There's a price on the apartment, and the servants, and the bright clothes and leisure," said Delp. His eyes grew pale. "I'm about to pay some more of it."

His tail stroked briefly over her back, then he beat wings and lifted into the air. A dozen armed males followed him. So did the eyes of Rodonis.

Under Mannenach's battered walls the Drak'ho rafts lay crowded, the disorder of war not yet cleaned up in the haste to enjoy a hard-bought victory. Only the full-time warriors remained alert, though no one else would need much warning if there should be an attack. It was the boast of the forecastle that a Fleet sailor, drunk and with a female on his knee, could outfight any three foreigners sober.

Delp, flapping across calm waters under a high cloudless day-sky, found himself weighing the morale value of such a pride against the sharp practical fact that a Lannach'ho fought like ten devils. The Drak'honai had won *this* time.

A cluster of swift canoes floated aloof, the admiral's standard drooping from one garlanded masthead. Theonax had come at Delp's urgent request, instead of making him go out to the main Fleet—which might mean that Theonax was prepared to bury the old hatred. (Rodonis would tell her husband nothing of what had passed between them, and he did not urge her; but it was perfectly obvious she had forced the pardon from the heir in some way.) Far more likely, though, the new admiral had come to keep an eye on this untrusted captain, who had so upset things by turning the holding operation on which he had been contemptuously ordered, into a major victory. It was not unknown for a field commander with such prestige to hoist the rebel flag and try for the Admiralty. Delp, who had no respect for Theonax but positive reverence for the office, bitterly resented that imputation.

He landed on the outrigger as prescribed and waited until the Horn of Welcome was blown on board. It took longer than necessary. Swallowing anger, Delp flapped to the canoe and prostrated himself.

"Rise," said Theonax in an indifferent tone. "Congratulations on your success. Now, you wished to confer with me?" He patted down a yawn. "Please do." "

Delp looked around at the faces of officers, warriors, and crewfolk. "In private, with the admiral's most trusted advisors, if it please him," he said.

"Oh? Do you consider what you have to say is that important?" Theonax nudged a young aristocrat beside him and winked.

Delp spread his wings, remembered where he was, and nodded. His neck was so stiff it hurt. "Yes, sir, I do," he got out.

"Very well." Theonax walked leisurely toward his cabin.

It was large enough for four, but only the two of them entered, with the young court favorite, who lay down and closed his eyes in boredom. "Does not the admiral wish advice?" asked Delp.

Theonax smiled. "So you don't intend to give me advice yourself, captain?"

Delp counted mentally to twenty, unclenched his teeth, and said:

"As the admiral wishes. I've been thinking about our basic strategy, and the battle here has rather alarmed me—"

"I didn't know you were frightened."

"Admiral, I... never mind! Look here sir, the enemy came within two fishhooks of beating us. They had the town. We've captured weapons from them equal or superior to our own, including a few gadgets I've never seen or heard of... and in incredible quantities, considering how little time they had to manufacture the stuff. Then too, they had these abominable new tactics, ground fighting—not as an incidental, like when we board an enemy raft, but as the main part of their effort!

"The only reason they lost was insufficient co-ordination between ground and air, and insufficient flexibility. They should have been ready to toss away their shields and take to the air in fully equipped squadrons at an instant's notice.

"And I don't think they'll neglect to remedy that fault, if we give them the chance."

Theonax buffed his nails on a sleek-furred arm and regarded them critically. "I don't like defeatists," he said.

"Admiral, I'm just trying not to underestimate them. It's pretty clear they got all these new ideas from the Eart'honai. What else do the Eart'honai know?"

"Hm-m-m. Yes." Theonax raised his head. A moment's uneasiness flickered in his gaze. "True. What do you propose?"

"They're off balance now," said Delp with rising eagerness. "I'm sure the disappointment has demoralized them. And of course, they've lost all that heavy equipment. If we hit them hard, we can end the war. What we must do is

inflict a decisive defeat on their entire army. Then they'll have to give up, yield this country to us or die like insects when their birthing time comes."

"Yes." Theonax smiled in a pleased way. "Like insects. Like dirty, filthy insects. We won't let them emigrate, captain."

"They deserve their chance," protested Delp.

"That's a question of high policy, captain, for me to decide."

"I'm... sorry, sir." After a moment: "But will the admiral, then, assign the bulk of our fighting forces to... to some reliable officer, with orders to hunt out the Lannach'honai?"

"You don't know just where they are?"

"They could be almost anywhere in the uplands, sir. That is, we have prisoners who can be made to guide us and give some information; Intelligence says their headquarters is a place called Psalmenbrox. But of course they can melt into the lands." Delp shuddered. To him, whose world had been lonely islands and flat sea horizon, there was horror in the tilted mountains. "It has infinite cover to hide them. This will be no easy campaign."

"How do you propose to wage it all?" asked Theonax querulously. He did not like to be reminded, on top of a victory celebration and a good dinner, that there was still much death ahead of him.

"By forcing them to meet us in an all-out encounter, sir. I want to take our main fighting strength, and some native guides compelled to help us, and go from town to town up there, systematically razing whatever we find, burning the woods and slaughtering the game. Give them no chance for the large battues on which they must depend to feed their females and cubs. Sooner or later, and probably sooner, they will have to gather every male and meet us. That's when I'll break them."

"I see." Theonax nodded. Then, with a grin: "And if they break you?"

"They won't."

"It is written: 'The Lodestar shines for no single nation.'"

"The admiral knows there's always some risk in war. But I'm convinced there's less danger in my plan than in hanging about down here, waiting for the Eart'honai to perfect some new devilment."

Theonax's forefinger stabbed at Delp. "Ah-hah! Have you forgotten' their food will soon be all gone? We can count them out."

"I wonder—"

"Be quiet!" shrilled Theonax.

After a little time, he went on: "Don't forget, this enormous expeditionary force of yours would leave the Fleet ill defended. And without the Fleet, the rafts, we ourselves are finished."

"Oh, don't be afraid of attack, sir—" began Delp in an eager voice.

"Afraid!" Theonax puffed himself out. "Captain, it is treason to hint that the admiral is a... is not fully competent."

"I didn't mean—"

"I shall not press the matter," said Theonax smoothly. "However, you may either make full abasement, craving my pardon, or leave my presence."

Delp stood up. His lips peeled back from the fangs, all the race memory of animal forebears who had been hunters bade him tear out the other's throat. Theonax crouched, ready to scream for help.

Very slowly, Delp mastered himself. He half turned to go. He paused, fists jammed into balls and the membrane of his wings swollen with blood.

"Well?" smiled Theonax.

Like an ill-designed machine, Delp went down on his belly. "I abase myself," he mumbled. "I eat your offal. I declare that my fathers were the slaves of your fathers. Like a netted fish, I gasp for pardon."

Theonax enjoyed himself. The fact that Delp had been so cleverly trapped between his pride and his wish to serve the Fleet, made it all the sweeter.

"Very good, captain," said the admiral when the ceremony was done. "Be thankful I didn't make you do this publicly. Now let me hear your argument. I believe you were saying something about the protection of our rafts."

"Yes... yes, sir. I was saying... the rafts need not fear the enemy."

"Indeed? True, they lie well out at sea, but not too far to reach in a few hours. What's to prevent the Flock army from assembling, unknown to you, in the mountains, then attacking the rafts before you can come to our help?"

"I would only hope they do so, sir." Delp recovered a little enthusiasm. "But I'm afraid their leadership isn't that stupid. Since when... I mean... at no time in naval history, sir, has a flying force, unsupported from the water, been able to overcome a fleet. At best, and at heavy cost, it can capture one or two rafts... temporarily, as in the raid when they stole the Eart'honai. Then the other vessels move in and drive it off. You see, sir, flyers can't use the engines of war, catapults and flamethrowers and so on, which alone can reduce a naval organization. Whereas the raft crews can stand under shelters and fire upward, picking the fliers off at leisure."

"Of course." Theonax nodded. "All this is so obvious as to be a gross waste of my time. But your idea is, I take it, that a small cadre of guards would suffice to hold off a Lannach'ho attack of any size."

"And, if we're lucky, keep the enemy busy out at sea till I could arrive with our main forces. But as I said, sir, they must have brains enough not to try it."

"You assume a great deal, captain," murmured Theonax. "You assume, not merely that I will let you go into the mountains at all, but that I will put you in command."

Delp bent his head and drooped his wings. "Apology, sir."

"I think... yes, I think it would be best if you just stayed here at Mannenach with your immediate flotilla."

"As the admiral wishes. Will he consider my plan, though?"

"Aeak'ha eat you!" snarled Theonax. "I've no love for you, Delp, as well you know; but your scheme is good, and you're the best one to carry it through. I shall appoint you in charge."

Delp stood as if struck with a maul.

"Get out," said Theonax. "We will have an official conference later."

"I thank my lord admiral—"

"Go, I said!"

When Delp had gone, Theonax turned to his favorite. "Don't look so worried," he said. "I know what you're thinking. The fellow will win his campaign, and become still more popular, and somewhere along the line he will get ideas about seizing the Admiralty."

"I only wondered how my lord planned to prevent that," said the courtier.

"Simple enough." Theonax grinned. "I know his type. As long as the war goes on, there's no danger of rebellion from him. So, let him break the Lan-nach'honai as he wishes. He'll pursue their remnants, to make sure of finishing the job. And in that pursuit—a stray arrow from somewhere—most regrettable—these things are easy to arrange. Yes."

## XV.

THIS ATMOSPHERE carried the dust particles which are the nuclei of water condensation to a higher, hence colder altitude. Thus Diomedes had more clouds and precipitation of all kinds than Earth. On a clear night you saw fewer stars; on a foggy night you did not see at all.

Mist rolled up through stony dales, until the young High Summer became a dripping chill twilight. The hordes lairing about Salmenbrok mumbled in their hunger and hopelessness: now the sun itself had withdrawn from them.

No campfires glowed, the wood of this region had all been burned. And the hinterland had been scoured clean of game, unripe wild grains, the very worms and insects, eaten by these many warriors. Now, in an eerie dank dark, only the wind and the rushing glacial waters lived... and Mount Oborch, sullenly prophesying deep in the earth.

Trolwen and Tolk went from the despair of their chieftains, over narrow trails where fog smoked and the high thin houses stood unreal, to the mill where the Eart'ska worked.

Here alone, it seemed, there was existence—fires still burned, stored water came down flumes to turn the wind-abandoned wheels, movement went under flickering tapers as lathes chattered and hammers thumped. Somehow, in some impossible fashion, Nicholas van Rijn had roared down the embittered protests of Angrek's gang, and their factory was at work.

*Working for what?* thought Trolwen, in a mind as gray as the mist.

Van Rijn himself met them at the door. He folded massive arms on hairy breast and said: "How do you, my friends? Here it goes well, we have soon a many artillery pieces ready."

"And what use will they be?" said Trolwen. "Oh, yes, we have enough to make Salmenbrok well-nigh impregnable. Which means, we could hole up here and let the enemy ring us in till we starve."

"Speak not to me of starving." Van Rijn fished in his pouch, extracted a dry bit of cheese, and regarded it mournfully. "To think, this was not so long ago a rich delicious Swiss. Now, not to rats would I offer it." He stuffed it into his mouth and chewed noisily. "My problem of belly stoking is worse than yours. *Imprimis*, the high boiling point of water here makes this a world of very bad cooks, with no idea about controlled temperatures. *Secundus*, did your porters haul me through the air, all that long lumpy way from Mannenach, to let me hunger into death?"

"I could wish we'd left you down there!" flared Trolwen.

"No," said Tolk. "He and his friends have striven, Flockchief."

"Forgive me," said Trolwen contritely. "It was only... I got the news... the Drak'honai have just destroyed Eiseldrae."

"An empty town, *nie?*"

"A holy town. And they set afire the woods around it." Trolwen arched his back. "This can't go on! Soon, even if we should somehow win, the land will be too desolated to support us."

"I think still you can spare a few forests," said Van Rijn. "This is not an overpopulated country."

"See here," said Trolwen in a harshening tone, "I've borne with you so far. I admit you're essentially right: that to fare out with all our power, for a decisive battle with the massed enemy, is to risk final destruction. But to sit here, doing nothing but make little guerrilla raids on their outposts, while they grind away our nation—that is to make certain we are doomed."

"We needed time," said Van Rijn. "Time to modify the extra field pieces, making up for what we lost at Mannenach."

"Why? They're not portable, without trains. And to make matters worse that motherless Delp has torn up the rails!"

"Oh, yes, they are portable. My young friend Wace has done a little redesigning. Knocked down, with females and cubs to help, everyone carrying a single small piece or two—we can tote a heavy battery of weapons, by damn!"

"I know. You've explained all this before. And I repeat: what will we use them against? If we set them up at some particular spot, the Drak'honai need only avoid that spot. And we can't stay very long in any one place, because our numbers eat it baren." Trolwen drew a breath. "I did not come here to argue, Eart'a. I came from the General Council of Lannach, to tell you that Salmenbrok's food is exhausted—and so is the army's patience. We *must* go out and fight!"

"We shall," said Van Rijn imperturbably. "Come, I will go talk at these puff-head councilors."

He stuck his head in the door: "Wace, boy, best you start to pack what we have. Soon we transport it."

"I heard you," said the younger man.

"Good. You make the work here, I make the politicking, so it goes along fine, *nie?*" Van Rijn rubbed shaggy fists, beamed, and shuffled off with Trolwen and Tolk.

Wace stared after him, into the blind fog-wall. "Yes," he said. "That's how it has been. We work, and he talks. Very equitable!"

"What do you mean?" Sandra raised her head from the table at which she sat marking gun parts with a small paintbrush. A score of females were working beside her.

"What I said. I wonder why I don't say it to his face. I'm not afraid of that fat parasite, and I don't want his mucking paycheck any more." Wace waved at the mill and its sooty confusion. "Do this, do that, he says, and then strolls off again. When I think how he's eating food which would keep you alive—"

"You do not understand?" She stared at him for a moment. "No, I think maybe you have been too busy, all the time here, to stop and think. And before then, you were a small-job man without the art of government, not?"

"What do you mean?" he echoed her. He regarded her with eyes washed-out and bleared by fatigue.

"Maybe later. Now we must hurry. Soon we will leave this town, and everything must be set to go."

This time she had found a place for her hands, in the ten or fifteen Earth-days since Mannenach. Van Rijn had demanded that everything—the excess war materiel, which there had luckily not been room enough to take down to battle—be made portable by air. That involved a certain amount of modification, so that the large wooden members could be cut up into smaller units, for reassembly where needed. Wace had managed that. But it would all be one chaos at journey's end, unless there was a system for identifying each item. Sandra had devised the markings and was painting them on.

Neither she nor Wace had stopped for much sleep. They had not even paused to wonder greatly what use there would be for their labor.

"Old Nick did say something about attacking the Fleet itself," muttered Wace. "Has he gone uncon? Are we supposed to land on the water and assemble our catapults?"

"Perhaps," said Sandra. Her tone was serene. "I do not worry so much any more. Soon it will be all decided because we have food for just four Earth-weeks or less."

"We can last at least two months without eating at all," he said.

"But we will be weak." She dropped her gaze. "Eric—"

"Yes?" He left his mill-powered obsidian-toothed circular saw, and came over to stand above her. The dull rush light caught drops of fog in her hair, they gleamed like tiny jewels.

"Soon... it will make no matter what I do... there will be hard work, needing strength and skill I have not... maybe fighting, where I am only one more bow, not a very strong bow even." Her fingernails whitened where she gripped her brush. "So when it comes to that, I will eat no more. You and Nicholas take my share."

"Don't be a fool," he said hoarsely.

She sat up straight, turned around and glared at him. Her pale cheeks reddened. "Do you not be the fool, Eric Wace," she snapped. "If I can give you and him just one extra week where you are strong—where your hunger does not keep you from even thinking clearly—then it will be myself I save too, perhaps. And if not, I have only lost one or two worthless weeks. Now get back to your machine!"

He watched her, for some small while, and his heart thuttered. Then he nodded and returned to his own work.

And down the trails to an open place of harsh grass, where the Council sat on a cliff's edge, Van Rijn picked his steadily swearing way.

The elders of Lannach lay like sphinxes against a skyline gone formless gray, and waited for him. Trolwen went to the head of the double line, Tolk remained by the human.

"In the name of the All-Wise, we are met," said the commander ritually. "Let sun and moons illumine our minds. Let the ghosts of our grandmothers lend us their guidance. May I not shame those who flew before me, nor those who come after." He relaxed a trifle. "Well, my officers, it's decided we can't stay here. I've brought the Eart'a to advise us. Will you explain the alternatives to him?"

A gaunt, angry-eyed old Lannacha hunched his wings and spat: "First, Flockchief, why is he here at all?"

"By the commander's invitation," said Tolk smoothly.

"I mean... Herald, let's not twist words. You know what I mean. The Mannenach expedition was undertaken at his urging. It cost us the worst defeat in our history. Since then, he has insisted our main body stay here, idle, while the enemy ravages an undefended land. I don't see why we should take his advice."

Trolwen's eyes were troubled. "Are there further challenges?" he asked, in a very low voice.

An indignant mumble went down the lines. "Yes yes ... yes ... let him answer, if he can."

Van Rijn turned turkey red and began to swell like a frog.

"The Eart'a has been challenged in Council," said Trolwen. "Does he wish to reply?"

He sat back then, waiting like the others.

Van Rijn exploded.

"Pest and damnation! Four million worms cocooning in hell! How long am I to be saddled with stupid ungratefuls? How many politicians and brass hats have You Up There plagued this universe with?" He waved his fists in the air and screamed. "Satan and sulfur! It is not to be stood! If you are all so hot to make suicides for yourselves, why does poor old Van Rijn have to hold on to your coat tails all the time? *Perbacco*, you stop insulting me or I stuff you down your own throats!" He advanced like a moving mountain, roaring at them. The nearest councilors flinched away.

"Eart'a... sir... officer... please!" whispered Trolwen.

When he had them sufficiently browbeaten, Van Rijn said coldly: "All rights. I tell you, by damn. I give you good advices and you stupid them up and blame me—but I am a poor patient old man, not like when I was young and strong, no, I suffer it with Christian meekness and keep on giving you good advices.

"I warned you and I warned you, do not hit Mannenach first, I warned you. I told you the rafts could come right up to its walls, and the rafts are the strength of the Fleet. I got down on these two poor old knees, begging and pleading with you first to take the key upland towns, but no, you would not listen to me. And still we *had* Mannenach, but the victory was stupid away... oh, if I had wings like an angel, so I could have led you in person! I would be cock-a-doodle-dooing on the admiral's masthead this moment, by holy Nicolai miter! That is why you take my advices, by damn—no, you take my orders! No more backward talking from you, or I wash my hands with you and make my own way home. From now on, if you want to keep living, when Van Rijn says frog, you jump. Understanding?"

He paused. He could hear his own asthmatic wheezes... and the far unhappy mumble of the camp, and the cold wet clinking of water down alien rocks... nothing more in all the world.

Finally Trolwen said in a weak voice: "If... if the challenge is considered answered... we shall resume our business."

No one spoke.

"Will the Eart'a take the word?" asked Tolk at last. He alone appeared self-possessed, in the critical glow of one who appreciates fine acting.

"*Ja*. I will say, I know we cannot remain here any more. You ask why I kept the army on leash and let Captain Delp have his way." Van Rijn ticked it off on his fingers. "*Imprimis*, to attack him directly is what he wants: he can most likely beat us, since his force is bigger and not so hungry or discouraged. *Secundus*, he will not advance to Salmenbrok while we are all here, since we could bushwhack him; therefore, by staying put the army has gained me a chance to make ready our artillery pieces. *Tertius*, it is my hope that by all this delay while I had the mill going, we have won the means of victory."

"What?" It barked from the throat of a councilor who forgot formalities.

"Ah." Van Rijn laid a finger to his imposing nose and winked. "We shall see. Maybe now you think even if I am a pitiful old weak tired man who should be in bed with hot toddies and a good cigar, still a Polesotechnic merchant is not just to sneeze at. So? Well, then. I propose we all leave this land and head north."

A hubbub broke loose. He waited patiently for it to subside.

"Order!" shouted Trolwen. "Order!" He slapped the hard earth with his tail. "Quiet, there, officers! Eart'a, there has been some talk of abandoning Lannach altogether—more and more of it, indeed, as our folk lose heart. We could still reach Swampy Kilnu in time to... to save most of our females and cubs at Birthtime. But it would be to give up our towns, our fields and forests—everything we have, everything our forebears labored for hundreds of years to create—to sink back into savagery, in a dark fever-haunted jungle, to become nothing—I myself will die in battle before making such a choice."

He drew a breath and hurled out: "But Kilnu is, at least, to the south. North of Achan, there is still ice!"

"Just so," said Van Rijn.

"Would you have us starve and freeze on the Dawnach glaciers? We can't land any further south than Dawnach; the Fleet's scouts would be certain to spot us anywhere in Holmenach. Unless you want to fight the last fight in the archipelago—?"

"No," said Van Rijn. "We should sneak up to this Dawnach place. We can pack a lunch—take maybe a ten-days' worth of food and fuel with us, as well as the armament—*nie?*"

"Well... yes... but even so... Are you suggesting we should attack the Fleet itself, the rafts, from the north? It would be an unexpected direction. But it would be just as hopeless."

"Surprise we will need for my plan," said Van Rijn. "*Ja*. We cannot tell the army. One of them might be captured in some skirmish and made to tell the Drak'honai. Best maybe I not even tell you."

"Enough!" said Trolwen. "Let me hear your scheme."

Much later: "It won't work. Oh, it might well be technically feasible. But it's a political impossibility."

"Politics!" groaned Van Rijn. "What is it this time?"

"The warriors... yes, and the females too, even the cubs, since it would be our whole nation which goes to Dawnach. They must be told why we do so. Yet the whole scheme, as you admit, will be ruined if one person falls into enemy hands and tells what he knows under torture."

"But he need not know," said Van Rijn. "All he need be told is, we spend a little while gathering food and wood to travel with. Then we are to pack up and go some other place, he has not been told where or why."

"We are not Drakska," said Trolwen angrily. "We are a free folk. I have no right to make so important a decision without submitting it to a vote."

"Hm-m-m... maybe you could talk to them?" Van Rijn tugged his mustaches. "Orate at them. Persuade them to waive their right to know and help decide. Talk them into following you with no questions."

"No," said Tolk. "I'm a specialist in the arts of persuasion, Eart'a, and I've measured the limits of those arts. We deal less with a Flock now than a mob—cold, hungry, without hope, without faith in its leaders, ready to give up everything—or rush forth to blind battle—they haven't the morale to follow anyone into an unknown venture."

"Morale can be pumped in," said Van Rijn. "I will try."

"*You!*"

"I am not so bad at oratings, myself, when there is need. Let me address them."

"They... they..." Tolk stared at him. Then he laughed, a jarringly sarcastic note. "Let it be done, Flockchief. Let's hear what words this Eart'a can find, so much better than our own."

And an hour later, he sat on a bluff, with his people a mass of shadow below him, and he heard Van Rijn bass come through the fog like thunder:

"...I say only, think what you have here, and what they would take away from you:

*"This royal throne of kings, this scepter'd isle,  
This earth of majesty, this seat of Mars,  
This other Eden, demi-paradise,  
This fortress built by Nature for herself  
Against infection and the hand of war,  
This happy breed... "*

"I don't comprehend all those words," whispered Tolk.

"Be still!" answered Trolwen. "Let me hear." There were tears in his eyes; he shivered.

*"...This blessed plot, this earth, this realm, this Lannach..."*

The army beat its wings and screamed.

Van Rijn continued through adaptations of Pericles' funeral speech, "Scots Wha' Hae," and the Gettysburg Address. By the time he had finished discussing St. Crispin's Day, he could have been elected commander if he chose.

## XVI.

THE ISLAND CALLED Dawnach lay well beyond the archipelago's end, several hundred kilometers north of Lannach. However swiftly the Flock flew, with pauses for rest on some bird-shrieking skerry, it was a matter of Earth-days to get there, and a physical nightmare for humans trussed in carrying nets. Afterward Wace's recollections of the trip were dim.

When he stood on the beach at their goal, his legs barely supporting him, it was small comfort. High Summer had come here also, and this was not too far north; still, the air remained wintry and Tolk said no one had ever tried to live here. The Holmenach islands deflected a cold current out of The Ocean, up into the Iceberg Sea, and those bitter waters flowed around Dawnach.

Now the Flock, wings and wings and wings dropping down from the sky until they hid its roiling grayness, had reached journey's conclusion: black sands, washed by heavy dark tides and climbing sheer up through permanent glaciers to the inflamed throat of a volcano. Thin straight trees were sprinkled over the lower slopes, between quaking tussocks; there were a few sea birds, to dip above the broken offshore ice-floes; otherwise the hidden sun threw its clotted-blood light on a sterile country.

Sandra shuddered. Wace was shocked to see how thin she had already grown. And now that they were here, in the last phase of their striving—belike of their lives—she intended to eat no more.

She wrapped her stinking coarse jacket more tightly about her. The wind caught snarled pale elflocks of her hair and fluttered them forlorn against black igneous cliffs. Around her crouched, walked, wriggled, and flapped ten thousand angry dragons: whistles and gutturals of unhuman speech, the cannon-crack of leathery wings, overrode the empty wind-whimper. As she rubbed her eyes, pathetically like a child, Wace saw that her once beautiful hands were bleeding where they had clung to the net, and that she shook with weariness.

He felt his heart twisted, and moved toward her. Nicholas van Rijn got there first, fat and greasy, with a roar for comfort: "So, by jolly damn, now we are here and soon I get you home again to a hot bath. Holy St. Dismas, right now I smell you three kilometers upwind!"

Lady Sandra Tamarin, heiress to the Grand Duchy of Hermes, gave him a ghostly smile. "If I could rest for a little—" she whispered.

"*Ja, ja*, we see." Van Rijn stuck two fingers in his mouth and let out an eardrum-breaking blast. It caught Trolwen's attention. "You there! Find her here a cave or something and tuck her in."

"I?" Trolwen bridled. "I have the Flock to see to!"

"You heard me, pot head." Van Rijn stumped off and buttonholed Wace. "Now, then. You are ready to begin work? Round up your crew, however many you need to start."

"I—" Wace backed away. "Look here, it's been I don't know how many hours since our last stop, and—"

Van Rijn spat. "And how many weeks makes it since I had a smoke or even so much a little glass Genever, ha? You have no considerations for other people." He pointed his beak heavenward and screamed: "Do I have to do everything? Why have You Up There filled up the galaxy with no-good loafers? It is not to be stood!"

"Well... well..." Wace saw Trolwen leading Sandra off, to find a place where she could sleep, forgetting cold and pain and loneliness for a few niggard hours. He struck a fist into his palm and said: "All right! But what will you be doing?"

"I must organize things, by damn. First I see Trolwen about a gang to cut trees and make masts and yards and oars. Meanwhiles all this canvas we have brought along has got to somehow be made in sails; and there are the riggings; and also we must fix up for eating and shelter—Bah! These is all details. It is not right I should be bothered. Details, I hire ones like you for."

"Is life anything but details?" snapped Wace.

Van Rijn's small gray eyes studied him for a moment. "So," rumbled the merchant, "it gives back talks from you too, ha? You think maybe just because I am old and weak, and do not stand so much the hardships like when I was young... maybe I only leech off your work, *nie?* Now is too small time for beating sense into your head. Maybe you learn for yourself." He snapped his fingers. "Jump!"

Wace went off, damning himself for not giving the old pig a fist in the stomach. He would, too, come the day! Not now... unfortunately, Van Rijn had somehow oozed into a position where it was him the Lannachska looked up to... instead of Wace, who did the actual work... Was that a paranoid thought?

No.

Take this matter of the ships, for instance. Van Rijn had pointed out that an island like Dawnach, loaded with pack ice and calving glaciers, afforded plenty of building material. Stone chisels would shape a vessel as big as any raft in the Fleet, in a few hours' work. The most primitive kind of blowtorch, an oil lamp with a bellows, would smooth it off. A crude mast and rudder could be planted in holes cut for the purpose: water, refreezing, would be a strong cement. With most of the Flock, males, females, old, young, made one enormous labor force for the project, a flotilla comparable in numbers to the whole Fleet could be made in a week.

*If* an engineer figured out all the practical procedure. How deep a hole to step your mast in? Is ballast needed? Just how do you make a nice clean cut in an irregular ice block hundreds of meters long? How about smoothing the bottom to reduce drag? The material was rather friable; it could be strengthened considerably by dashing bucketsful of mixed sawdust and sea water over the finished hull, letting this freeze as a kind of armor—but what proportions?

There was no time to really test these things. Somehow, by God and by guess, with every element against him, Eric Wace was expected to produce.

And Van Rijn? What did Van Rijn contribute? The basic idea, airily tossed off, apparently on the assumption that Wace was Aladdin's jinni. Oh, it was quite a flash of imaginative insight, no one could deny that. But imagination is cheap.

Anyone can say: "What we need is a new weapon, and we can make it from such-and-such unprecedented materials." But it will remain an idle fantasy until somebody shows up who can figure out *how* to make the needed weapon.

So, having enslaved his engineer, Van Rijn strolled around, jollyng some of the Flock and bullying some of the others—and when he had them all working their idiotic heads off, he rolled up in a blanket and went to sleep!

## XVII.

WACE STOOD on the deck of the *Rijstaffel* and watched his enemy come over the world's rim.

Slowly, he reached into the pouch at his side. His hand closed on a chunk of stale bread and a slab of sausage. It was the last Terrestrial food remaining: for Earth-days, now, he had gone on a still thinner ration than before, so that he could enter this battle with something in his stomach.

He found that he didn't want it after all.

Surprisingly little cold breathed up from underfoot. The warm air over the Sea of Achan wafted the ice-chill away. He was less astonished that there had been no appreciable melting in the week he estimated they had been creeping southward; he knew the thermal properties of water.

Behind him, primitive square sails, lashed to yard-arms of green wood on overstrained one-piece masts, bellied in the north wind. These ice ships were tubby, but considerably less so than a Drak'ho raft; and with some unbelievable talent for tyranny, Van Rijn had gotten reluctant Lannachska to work under frigid sea water, cutting the bottoms into a vaguely streamlined shape. Now, given the power of a Diomedean breeze, Lannach's war fleet waddled through Achan waves at a good five knots.

Though the hardest moment, Wace reflected, had not been while they worked their hearts out to finish the craft. It had come afterward, when they were almost ready to leave and the winds turned contrary.

For a period measured in Earth-days, thousands of Lannachska huddled soul-sick under freezing rains, ranging after fish and bird rookeries to feed cubs that cried with hunger. Councilors and clan leaders had argued that this was a war on the Fates: there could be no choice but to give up and seek out Swampy Kilnu. Somehow, blustering, shining, pleading, promising—in a few cases, bribing, with what he had won at dice—Van Rijn had held them on Dawnach.

Well—it was over with.

The merchant came out of the little stone cabin, walked over the gravel-strewn deck past crouching war-engines and heaped missiles, till he reached the bows where Wace stood.

"Best you eat," he said. "Soon gives no chance."

"I'm not hungry," said Wace.

"So, no?" Van Rijn grabbed the sandwich out of his fingers. "Then, by damn, I am!" He began cramming it between his teeth.

Once again he wore a double set of armor, but he had chosen one weapon only for this occasion, an outside stone ax with a meter-long handle. Wace carried a smaller tomahawk and a shield. Around the humans, it bristled with armed Lannachska.

"They're making ready to receive us, all right," said Wace. His eyes sought out the gaunt enemy war-canoes, beating upwind.

"You expected a carpet with acres and acres, like they say in America? I bet you they spotted us from the air hours ago. Now they send messengers hurry-like back to their army in Lannach." Van Rijn held up the last fragment of meat, kissed it reverently, and ate it.

Wace's eyes traveled backward. This was the flagship—chosen as such when it turned out to be the fastest—and had the forward position in a long wedge. Several score grayish-white, ragged-sailed, helter-skelter little vessels wallowed after. They were outnumbered and outgunned by the Drak'ho rafts, of course; they just had to hope the odds weren't too great. The much lower freeboard did not matter to a winged race, but it would be important that their crews were not very skilled sailors—

But at least the Lannachska were fighters. Winged tigers by now, thought Wace. The southward voyage had rested them, and trawling had provided the means to feed them, and the will to battle had kindled again. Also, though they had a smaller navy, they probably had more warriors, even counting Delp's absent army.

And they could afford to be reckless. Their females and young were still on Dawnach—with Sandra, grown so white and quiet—and they had no treasures along to worry about. For cargo they bore just their weapons and their hate.

From the clouds of air-borne, Tolk the Herald came down. He braked on extended wings, slithered to a landing, and curved back his neck swan-fashion to regard the humans.

"Does it all go well down here?" he asked.

"As well as may be," said Van Rijn. "Are we still bearing on the pest-rotten Fleet?"

"Yes. It's not many buaska away now. Barely over your sea-level horizon, in fact; you'll raise it soon. They're using sail and oars alike, trying to get out of our path, but they'll not achieve it if we keep this wind and those canoes don't delay us."

"No sign of the army in Lannach?"

"None yet. I daresay what's-his-name... the new admiral that we heard about from those prisoners... has messengers scouring the mountains. But that's a big land up there. It will take time to locate him." Tolk snorted professional scorn. "Now I would have had constant liaison, a steady two-way flow of Whistlers."

"Still," said Van Rijn, "we must expect them soon, and then gives hell's safety valve popping off."

"Are you certain we can—"

"I am certain of nothings. Now get back to Trolwen and oversee."

Tolk nodded and hit the air again.

Dark purplish water curled in white feathers, beneath a high heaven where clouds ran like playful mountains, tinted rosy by the sun. Not many kilometers off, a small island rose sheer; through a telescope, Wace could count the patches of yellow blossom nodding under tall bluish conifers. A pair of young Whistlers dipped and soared over his head, dancing like the gay clan banners being unfurled in the sky. It was hard to understand that the slim carved boats racing so near bore fire and sharpened stones.

"Well," said Van Rijn, "here begins our fun. Good St. Dismas, stand by me now."

"St. George would be a little more appropriate, wouldn't he?" asked Wace.

"You may think so. Me, I am too old and fat and cowardly to call on Michael or George or Olaf or any like those soldierly fellows. I feel more at home, me, with saints not so bloody energetic, Dismas or my own good namesake who is so kind to travelers."

"And is also the patron of highway men," remarked Wace. He wished his tongue wouldn't get so thick and dry on him. He felt remote, somehow... not really afraid... but his knees were rubbery.

"Ha!" boomed Van Rijn. "Good shootings, boy!"

The forward ballista on the *Rijstaffel*, with a whine and a thump, had smacked a half-ton stone into the nearest canoe. The boat cracked like a twig; its crew whirled up, a squad from Trolwen's aerial command pounced, there was a moment's murderous confusion and then the Drak'honai had stopped existing.

Van Rijn grabbed the astonished ballista captain by the hands and danced him over the deck, bawling out,

*"Du bist mein Sonnenschein,  
mein einzig Sonnenschein,  
du machst mir freulich—"*

Another canoe swung about, close-hauled. Wace saw its flamethrower crew bent over their engine and hurled himself flat under the low wall surrounding the ice deck.

The burning stream hit that wall, splashed back, and spread itself on the sea. It could not kindle frozen water, nor melt enough of it to notice. Sheltered amidships, a hundred Lannacha archers sent an arrow-sleet up, to arc under heaven and come down on the canoe.

Wace peered over the wall. The flamethrower pumpman seemed dead, the hoseman was preoccupied with a transfixed wing... no steersman either, the canoe's boom slatted about in a meaningless arc while its crew huddled... "Dead ahead!" he roared. "Ram them!"

The Lannacha ship trampled the dugout underfoot.

Drak'ho canoes circled like wolves around a buffalo herd, using their speed and maneuverability. Several darted between ice vessels, to assail from the rear; others went past the ends of the wedge formation. It was not quite a one-sided battle—arrows, catapult bolts, flung stones, all hurt Lannachaska; oil jugs arced across the water, exploding on ice decks; now and then a fire stream ignited a sail.

But winged creatures with a few buckets could douse burning canvas. During all that phase of the engagement, only one Lannacha craft was wholly dismantled, and its crew simply abandoned it, parceling themselves out among other vessels. Nothing else could catch fire, except live flesh, which has always been the cheapest article in war.

Several canoes, converging on a single ship, tried to board. They were nonetheless outnumbered, and paid heavily for the attempt. Meanwhile Trolwen, with absolute air mastery, swooped and shot and hammered.

Drak'ho canoes scarcely hindered the attack. The dugouts were rammed, broken, set afire, brushed aside by their unsinkable enemy.

By virtue of being first, of having more or less punched through the line, the *Rijstaffel* met little opposition. What there was, was beaten off by catapult, ballista, fire pot, and arrows: long-range gunnery. The sea itself burned and smoked behind; ahead lay the great rafts.

When those sails and banners came into view, Wace's dragon crewmen began to sing the victory song of the Flock.

"A little premature, aren't they?" he cried above the racket.

"Ah," said Van Rijn quietly, "let them make fun now. So many will soon be down, blind among the fishes, *nie?*"

"I suppose—" Hastily, as if afraid of what he had done merely to save his own life, Wace said: "I like that melody, don't you? It's rather like some old American folk songs. *John Hartly*, say."

"Folk songs is all right if you should want to play you are Folk in great big capitals," snorted Van Rijn. "I stick with Mozart, by damn."

He stared down into the water, and a curious wistfulness tinged his voice. "I always hoped maybe I would understand Bach some day, before I die, old Johann Sebastian who talked with God in mathematics. I have not the brains, though, in this dumb old head. So maybe I ask only one more chance to listen at *Eine Kleine Nachtmusik*."

There was an uproar in the Fleet. Slowly and ponderously, churning the sea with spider-leg oars, the rafts were giving up their attempt at evasion. They were pulling into war formation.

Van Rijn waved angrily at a Whistler. "Quick! You get upstairs fast, and tell that crotchhead Trolwen not to bother air-covering us against the canoes. Have him attack the rafts. Keep them busy, by hell! Don't let messengers flappity-flip between enemy captains so they can organize!"

As the young Lannacha streaked away, the merchant tugged his goatee—almost lost by now in a dirt-stiffened beard—and snarled: "Great hairy honeypots! How long do I have to do all the thinkings? Good St. Nicholas, you bring me an officer staff with brains between the ears, instead of clabbered oatmeal, and I build you a cathedral on Mars! You hear me?"

"Trolwen is in the midst of a fight up there," protested Wace. "You can't expect him to think of everything."

"Maybe not," conceded Van Rijn grudgingly. "Maybe I am the only one in all the galaxy who makes no mistakes."

Horribly near, the massed rafts became a storm when Trolwen took his advice. Bat-winged devils sought each other's lives through one red chaos. Wace thought his own ships' advance must be nearly unnoticed in that whirling, shrieking destruction.

"They're *not* getting integrated!" he said, beating his fist on the wall. "Before God, they're not!"

A Whistler landed, coughing blood; there was a monstrous bruise on his side. "Over there... Tolk the Herald says... empty spot... drive wedge in Fleet..." The thin body arced and then slid inertly to the deck. Wace stooped, taking the unhuman youth in his arms. He heard blood gurgle in lungs pierced by the broken ends of ribs.

"Mother, mother," gasped the Whistler. "He hit me with an ax. Make it stop hurting, mother."

Presently he died.

Van Rijn cursed his awkward vessel into a course change—not more than a few degrees, it wasn't capable of more, but as the nearer rafts began to loom above the ice deck, it could be seen that there was a wide gap in their line. Trolwen's assault had so far prevented its being closed. Red-stained water, littered with dropped spears and bows, pointed like a hand toward the admiral's floating castle.

"In there!" bawled Van Rijn. "Clobber them! Eat them for breakfast!"

A catapult bolt came whirring over the wall, ripped through his sleeve and showered ice chips where it struck. Then three streams of liquid fire converged on the *Rijstaffel*.

Flame fingers groped their way across the deck, one Lannacha lay screaming and charring where they had touched him, and found the sails. It was no use to pour water this time: oil-drenched, mast and rigging and canvas became one great torch.

Van Rijn left the helmsman he had been swearing at and bounded across the deck, slipped where some of it had melted, skated on his broad bottom till he fetched up against a wall, and crawled back to his feet calling down damnation on the cosmos. Up to the starboard shrouds he limped, and his stone ax began gnawing the cordage. "Here!" he yelled. "Fast! Help me, you jelly-bones! Quick, have you got fur on the brain, quick before we drift past!"

Wace, directing the ballista crew, which was stoning a nearby raft, understood only vaguely. Others were more ready than he. They swarmed to Van Rijn and hewed. He himself sought the racked oil bombs and broke one at the foot of the burning mast.

Its socket melted, held up only by the shrouds, the enormous torch fell to port when the starboard lines were slashed. It struck the raft there; flames ran from it, beating back frantic Drak'ho crewmen who would push it loose; rigging caught; timbers began to char. As the *Rijstaffel* drifted away, that enemy vessel turned into a single bellowing pyre.

Now the ice ship was nearly uncontrollable, driven by momentum and chance currents deeper into the confused Fleet. But through the gap which Van Rijn had so ardently widened, the rest of the Lannacha craft pushed. War-flames raged between floating monsters—but wood will burn and ice will not.

Through a growing smoke-haze, among darts and arrows that rattled down from above, on a deck strewn with dead and hurt but still filled by the revengeful hale, Wace trod to the nearest bomb crew. They were preparing to ignite another raft as soon as the ship's drift brought them into range.

"No," he said.

"What?" The captain turned a sooty face to him, crest adroop with weariness. "But sir, they'll be pumping fire at us!"

"We can stand that," said Wace. "We're pretty well sheltered by our walls. I don't want to burn that raft. I want to capture it!"

The Diomedean whistled. Then his wings spread and his eyes flared and he asked: "May I be the first on board it?"

Van Rijn passed by, hefting his ax. He could not have heard what was said, but he rumbled: "*Ja*. I was just about to order this. We can use us a transportation that maneuvers."

The word went over the ship. Its slippery deck darkened with armed shapes that waited. Closer and closer, the wrought ice-floe bore down on the higher and more massive raft. Fire, stones, and quarrels reached out for the Lannachska. They endured it, grimly. Wace sent a Whistler up to Trolwen to ask for help; a flying detachment silenced the Drak'ho artillery with arrows.

Trolwen still had overwhelming numerical superiority. He could choke the sky with his warriors, pinning the Drak'honai to their decks to await sea-borne assault. So far, thought Wace, Diomedes' miserly gods had been smiling on him. It couldn't last much longer.

He followed the first Lannacha wave, which had flown to clear a bridgehead on the raft. He sprang from the ice-floe when it bumped to a halt, grasped a massive timber, and scrambled up the side. When he reached the top and unlimbered his tomahawk and shield, he found himself in a line of warriors. Smoke from the burnings elsewhere stung his eyes; only indistinctly did he see the defending Drak'honai, pulled into ranks ahead of him and up on the higher decks.

Had the yelling and tumbling about overhead suddenly redoubled?

A stumpy finger tapped him. He turned around to meet Van Rijn's porcine gaze.

"Whoof and whoo! What for a climb that was! Better I should have stayed, *nie*? Well, boy, we are on our own now. Tolk just sent me word, the whole Drak'ho Expeditionary Force is in sight and lolling hereward fast."

## XVIII.

BRIEFLY, Wace felt sick. Had it all come to this, a chipped flint in his skull after Delp's army had beaten off the Lannachska?

Then he remembered standing on the cold black beach of Dawnach, shortly before they sailed, and wondering aloud if he would ever again speak with Sandra. "I'll have the easy part if we lose," he had said. "It'll be over quickly enough for me. But you—"

She gave him a look that brimmed with pride, and answered: "What makes you think you can lose?"

He hefted his weapon. The lean winged bodies about him hissed, bristled, and glided ahead.

These were mostly troopers from the Mannenach attempt; every ice ship bore a fair number who had been taught the elements of ground fighting. And on the whole trip south to find the Fleet, Van Rijn and the Lannacha captains had exhorted them: "Do not join our aerial forces. Stay on the decks when we board a raft. This whole plan hinges on how many rafts we can seize or destroy. Trolwen and his air squadrons will merely be up there to support *you*."

The idea took root reluctantly in any Diomedean brain. Wace was not at all certain it wouldn't die within the next hour, leaving him and Van Rijn marooned on hostile timbers while their comrades soared up to a pointless sky battle. But he had no choice, save to trust them now.

He broke into a run. The screech that his followers let out tore at his eardrums.

Wings threshed before him. Instinctively, the untrained Drak'ho lines were breaking up. Through geological eras, the only sane thing for a Diomedean to do had been to get above an attacker. Wace stormed on where they had stood.

Lifting from all the raft, enemy sailors stooped on these curious unflapping adversaries. A Lannacha forgot himself, flapped up, and was struck by three meteor bodies. He was hurled like a broken puppet into the sea. The Drak'honai rushed downward.

And they met spears which snapped up like a picket fence. No few of Lannach's one-time ground troopers had rescued their basketwork shields from the last retreat and were now again transformed into artificial turtles. The rest fended off the aerial assault—and the archers made ready.

Wace heard the sinister whistle rise behind him, and saw fifty Drak'honai fall.

Then a dragon roared in his face, striking with a knife-toothed rake. Wace caught the blow on his shield. It shuddered in his left arm, numbing the muscles. He lashed out a heavy-shod foot, caught the hard belly and heard the wind leave the Drak'ho. His tomahawk rose and fell with a dull chopping sound. The Diomedean fluttered away, pawing at a broken wing.

Wace hurried on. The Drak'honai, stunned by the boarding party's tactics, were now milling around overhead out of bowshot. Females snarled in the forecastle doors, spreading wings to defend their screaming cubs. They were ignored: the object was to capture the raft's artillery.

Someone up there must have seen what was intended. His hawk-shriek and hawk-stoop were ended by a Lannacha arrow; but then an organized line peeled off the Drak'honai mass, plummeted to the forecastle deck, and took stance before the main battery of flamethrowers and ballistae.

"So!" rumbled Van Rijn. "They make happy fun games after all. We see about this!"

He broke into an elephantine trot, whirling the great mallet over his head. A slingstone bounced off his leather-decked abdomen, an arrow ripped along one cheek, blowgun darts pincushioned his double cuirass. He got a boost from two winged guards, up the sheer ladderless bulkhead of the forecastle. Then he was in among the defenders.

"*Je maintiendrai!*" he bawled, and stove in the head of the nearest Drak'ho. "*God sent the right!*" he shouted, stamping on the shaft of a rake that clawed after him. "*Fram, fram, Kristmenn, Krossmenn, Kongsmenn!*" he bellowed, drumming on the ribs of three warriors who ramped close. "*Heineken's Bier!*" he trumpeted, turning to wrestle with a winged shape that fastened onto his back, and wringing its neck.

Wace and the Lannachska joined him. There was an interval with hammer and thrust and the huge bone-breaking buffets of wing and tail. The Drak'honai broke. Van Rijn sprang to the flamethrower and pumped. "Aim the hose!" he panted. "Flush them out, you bat-infested heads!" A gleeful Lannacha seized the ceramic nozzle, pressed the hardwood ignition piston, and squirted burning oil upward.

Down on the lower decks, ballistae began to thump, catapults sang and other flamethrowers licked. A party from the ice ship reassembled one of their wooden machine guns and poured darts at the last Drak'ho counterassault.

A female shape ran from the forecastle. "It's our husbands they kill!" she shrieked. "Destroy them!"

Van Rijn leaped off the upper deck, a three-meter fall. Planks thundered and groaned when he hit them. Puffing, waving his arms, he got ahead of the frantic creature. "Get back!" he yelled in her own language. "Back inside! Shoo! Scat! Want to leave your cubs unprotected? I eat young Drak'honai! With horseradish!"

She wailed and scuttled back to shelter. Wace let out a gasp. His skin was sodden with sweat. It had not been too serious a danger, perhaps... in theory, a female mob could have been massacred under the eyes of its young... but who could bring himself to that? Not Eric Wace, certainly. Better give up and take one's spear thrust like a gentleman.

He realized, then, that the raft was his.

Smoke still thickened the air too much for him to see very well what was going on elsewhere. Now and then, through a breach in it, appeared some vision: a raft set unquenchably afire, abandoned; an ice vessel, cracked, dismasted, arrow-swept, still bleakly slugging it out; another Lannacha ship laying to against a raft, another boarding party; the banner of a Lannacha clan blowing in sudden triumph on a foreign masthead. Wace had no idea how the sea fight as a whole was going—how many ice craft had been raked clean, deserted by discouraged crews, seized by Drak'ho counterattack, left drifting uselessly remote from the enemy.

It had been perfectly clear, he thought—Van Rijn had said it bluntly enough to Trolwen and the Council—that the smaller, less well equipped, virtually untrained Lannacha navy would have no chance whatsoever of decisively whipping the Fleet. The crucial phase of this battle was not going to involve stones or flames.

He looked up. Beyond the spars and lines, where the haze did not reach, heaven lay unbelievably cool. The formations of war, weaving in and about, were so far above him that they looked like darting swallows.

Only after minutes did his inexpert eye grasp the picture.

With most of his force down among the rafts, Trolwen was ridiculously outnumbered in the air as soon as Delp arrived. On the other hand, Delp's folk had been flying for hours to get here; they were no match individually for well-rested Lannachska. Realizing this, each commander used his peculiar advantage: Delp ordered unbreakable mass charges, Trolwen used small squadrons which swooped in, snapped wolfishly, and darted back again. The Lannachska retreated all the time, except when Delp tried to send a large body of warriors down to relieve the rafts. Then the entire, superbly integrated air force at Trolwen's disposal would smash into that body. It would disperse when Delp brought in reinforcements, but it had accomplished its purpose—to break up the formation and checkrein the seaward movement.

So it went, for some timeless time in the wind under the High Summer sun. Wace lost himself, contemplating the terrible beauty of death winged and disciplined. Van Rijn's voice pulled him grudgingly back to luckless unflitting humanness.

"Wake up! Are you making dreams, maybe, like you stand there with your teeth hanging out and flapping in the breeze? Lightnings and Lucifer! If we want to keep this raft, we have to make some use with it, by damn. You boss the battery here and I go tell the helmsman what to do. So!" He huffed off, like an ancient steam locomotive in weight and noise and sootiness.

They had beaten off every attempt at recapture, until the expelled crew went wrathfully up to join Delp's legions. Now, awkwardly handling the big sails, or ordered protestingly below to the sweeps, Van Rijn's gang got their new vessel into motion. It grunted its way across a roiled, smoky waste of water, until a Drak'ho craft loomed before it. Then the broadsides cut loose, the arrows went like sleet, and crew locked with crew in troubled air midway between the thuttering rafts.

Wace stood his ground on the foredeck, directing the fire of its banked engines: stones, quarrels, bombs, oil-streams, hurled across a few meters to shower splinters and char wood as they struck. Once he organized a bucket brigade, to put out the fire set by an enemy hit. Once he saw one of his new catapults, and its crew, smashed by a two-ton rock, and forced the survivors to lever that stone into the sea and rejoin the fight. He saw how sails grew tattered, yards sagged drunkenly, bodies heaped themselves on both vessels after each clumsy round. And he wondered, in a dim part of his brain, why life had no more sense, anywhere in the known universe, than to be forever tearing itself.

Van Rijn did not have the quality of crew to win by sheer bombardment, like a neolithic Nelson. Nor did he especially want to try boarding still another craft; it was all his little tyro force could do to man and fight this one. But he pressed stubbornly in, holding the helmsmen to their collision course, going belowdecks himself to keep exhausted Lannachska at their heavy oars. And his raft wallowed its way through a firestorm, a stonestorm, a storm of living bodies, until it was almost on the enemy vessel.

Then horns hooted among the Drak'honai, their sweeps churned water and they broke from their place in the Fleet's formation to disengage.

Van Rijn let them go, vanishing into the hazed masts and cordage that reached for kilometers around him. He stumped to the nearest hatch, went down through the poopdeck cabins and so out on the main deck. He rubbed his hands and chortled. "Aha! We gave him a little scare, eh, what say? He'll not come near any of our boats soon again, him!"

"I don't understand, councilor," said Angrek, with immense respect. "We had a smaller crew, with far less skill. He ought to have stayed put, or even moved in on us. He could have wiped us out, if we didn't abandon ship altogether."

"Ah!" said Van Rijn. He wagged a sausagelike finger. "But you see, my young and innocent one, he is carrying females and cubs, as well as many valuable tools and other goods. His whole life is on his raft. He dare not risk its destruction; we could so easy set it hopeless afire, even if we can't make capture. Ha! It will be a frosty morning in hell when they outthink Nicholas van Rijn, by damn!"

"Females—" Angrek's eyes shifted to the forecastle. A lickerish light rose in them.

"After all," he murmured, "it's not as if they were *our* females—"

A score or more Lannachska were already drifting in that same direction, elaborately casual—but their wings were held stiff and their tails twitched. It was noteworthy that more of the recent oarsmen were in that group than any other class.

Wace came running to the forecandle's edge. He leaned over it, cupped his hands and shouted: "Freeman van Rijn! Look upstairs!"

"So." The merchant raised puffed little eyes, blinked, sneezed, and blew his craggy nose. One by one, the Lannachska resting on scarred bloody decks lifted their own gaze skyward. And a stillness fell on them.

Up there, the struggle was ending.

Delp had finally assembled his forces into a single irresistible mass and taken them down as a unit to sea level. There they joined the embattled raft crews—one raft at a time. A Lannachska boarding party, so suddenly and grossly outnumbered, had no choice but to flee, abandon even its own ice ship, and go up to Trolwen.

The Drak'honai made only one attempt to recapture a raft which was fully in Lannacha possession. It cost them gruesomely. The classic dictum still held, that purely air-borne forces were relatively impotent against a well-defended unit of the Fleet.

Having settled in this decisive manner exactly who held every single raft, Delp reorganized and led a sizable portion of his troops aloft again to engage Trolwen's augmented air squadrons. If he could clear them away, then, given the craft remaining to Drak'ho plus total sky domination, Delp could regain the lost vessels.

But Trolwen did not clear away so easily. And, while naval fights such as Van Rijn had been waged went on below, a vicious combat traveled through the clouds. Both were indecisive.

Such was the overall view of events, as Tolk related it to the humans an hour or so later. All that could be seen from the water was that the sky armies were separating. They hovered and wheeled, dizzily high overhead, two tangled masses of black dots against ruddy-tinged cloud banks. Doubtless threats, curses, and boasts were tossed across the wind between them, but there were no more arrows.

"What is it?" gasped Angrek. "What's happening up there?"

"A truce, of course," said Van Rijn. He picked his teeth with a fingernail, hawked, and patted his abdomen complacently. "They was making nowheres, so finally Tolk got someone through to Delp and said let's talk this over, and Delp agreed."

"But—we can't—you can't bargain with a Draka! He's not... *he's alien!*"

A growl of goose-pimpled loathing assent went along the weary groups of Lannachska.

"You can't reason with a filthy wild animal like that," said Angrek. "All you can do is kill it. Or it will kill you!"

Van Rijn cocked a brow at Wace, who stood on the deck above him, and said in Anglic: "I thought maybe we could tell them now that this truce is the only objective of all our fighting so far—but maybe not just yet, *nie?*"

"I wonder if we'll ever dare admit it," said the younger man.

"We will have to admit it, this very day, and hope we do not get stuffed alive with red peppers for what we say. After all, we did make Trolwen and the Council agree. But then, they are very hard-boiled-egg heads, them." Van Rijn shrugged. "Comes now the talking. So far we have had it soft. This is the times that fry men's souls. Ha! Have you got the nerve to see it through?"

## XIX.

APPROXIMATELY one tenth of the rafts lumbered out of the general confusion and assembled a few kilometers away. They were joined by such ice ships as were still in service. The decks of all were jammed with tensely waiting warriors. These were the vessels held by Lannach.

Another tenth or so still burned, or had been torn and beaten by stonefire until they were breaking up under Achan's mild waves. These were the derelicts, abandoned by both nations. Among them were many dugouts, splintered, broken, kindled, or crewed only by dead Drak'honai.

The remainder drew into a mass around the admiral's castle. This was no group of fully manned, fully equipped rafts and canoes; no crew had escaped losses, and a good many vessels were battered nearly into uselessness. If the Fleet could get half their normal fighting strength back into action, they would be very, very lucky.

Nevertheless, this would be almost three times as many units as the Lannachska now held *in toto*. The numbers of males on either side were roughly equal; but, with more cargo space, the Drak'honai had more ammunition. Each of their vessels was also individually superior: better constructed than an ice ship, better crewed than a captured raft.

In short, Drak'ho still held the balance of power.

As he helped Van Rijn down into a seized canoe, Tolk said wryly: "I'd have kept my armor on if I were you, Eart'a. You'll only have to be laced back into it, when the truce ends."

"Ah." The merchant stretched monstrously, puffed out his stomach, and plumped himself down on a seat. "Let us suppose, though, the armistice does not break. Then I will have been wearing that bloody-besmeared corset all for nothings."

"I notice," added Wace, "neither you nor Trolwen are cuirassed."

The commander smoothed his mahogany fur with a nervous hand. "That's for the dignity of the Flock," he muttered. "Those muck-walkers aren't going to think I'm afraid of them."

The canoe shoved off, its crew bent to the oars, it skipped swiftly over wrinkled dark waters. Above it dipped and soared the rest of the agreed-on Lannacha guard, putting on their best demonstration of parade flying for the edification of the enemy. There were about a hundred all told. It was comfortlessly little to take into the angered Fleet.

"I don't expect to reach any agreement," said Trolwen. "No one can—with a mind as foreign as theirs."

"The Fleet peoples are just like you," said Van Rijn. "What you need is more brotherhood, by damn. You should bash in their heads without this race prejudice."

"Just like *us*?" Trolwen bristled. His eyes grew flat glass-yellow. "See here, Eart'a—"

"Never mind," said Van Rijn. "So they do not have a rutting season. So you think this is a big thing. All right. I got some thinkings to make of my own. Shut up."

The wind ruffled waves and strummed idly on rigging. The sun struck long copper-tinged rays through scudding cloudbanks, to walk on the sea with fiery footprints. The air was cool, damp, smelling a little of salty life. It would not be an easy time to die, thought Wace. Hardest of all, though, to forsake Sandra, where she lay dwindling under the ice cliffs of Dawrnach. *Pray for my soul, beloved, while you wait to follow me. Pray for my soul.*

"Leaving personal feelings aside," said Tolk, "there's much in the commander's remarks. That is, a folk with lives as alien to ours as the Drakska will have minds equally alien. I don't pretend to follow the thoughts of you Eart'ska: I consider you my friends, but let's admit it, we have very little in common. I only trust you because your immediate motive—survival—has been made so clear to me. When I don't quite follow your reasoning, I can safely assume that it is at least well-intentioned.

"But the Drakska, now—how can they be trusted? Let's say that a peace agreement is made. How can we know they'll keep it? They may have no concept of honor at all, just as they lack all concept of sexual decency. Or, even if they do intend to abide by their oaths, are we sure the words of the treaty will mean the same thing to them as to us? In my capacity of Herald, I've seen many semantic misunderstandings between tribes with different languages. So what of tribes with different instincts?

"Or I wonder... can we even trust ourselves to keep such a pledge? We do not hate anyone merely for having fought us. But we hate dishonor, perversion, uncleanliness. How can we live with ourselves, if we make peace with creatures whom the gods must loathe?"

He sighed and looked moodily ahead to the nearing rafts.

Wace shrugged. "Has it occurred to you, they are thinking very much the same things about you?" he retorted.

"Of course they are," said Tolk. "That's yet another hailstorm in the path of negotiations."

*Personally, thought Wace, I'll be satisfied with a temporary settlement. Just let them patch up their differences long enough for a message to reach Thursday Landing. (How?) Then they can rip each other's throats out for all I care.*

He glanced around him, at the slim winged forms, and thought of work and war, torment and triumph—yes, and now and then some laughter or a fragment of song—shared. He thought of high-hearted Trolwen, philosophic Tolk, earnest young Angrek, he thought of brave kindly Delp and his wife Rondonis, who was so much more a lady than many a human female he had known. And the small furry cubs which tumbled in the dust or climbed into his lap... *No, he told himself, I'm wrong. It means a great deal to me, after all, that this war should be permanently ended.*

The canoe slipped in between towering raft walls. Drak'ho faces looked stonily down on it. Now and then someone spat into its wake. They were all very quiet.

The unwieldy pile of the flagship loomed ahead. There were banners strung from the mastheads, and a guard in bright regalia formed a ring enclosing the main deck. Just before the wooden castle, sprawled on furs and cushions, Admiral Theonax and his advisory council waited. To one side stood Captain Delp with a few personal guards, in war-harness still sweaty and unkempt.

Total silence lay over them as the canoe came to a halt and made fast to a bollard. Trolwen, Tolk, and most of the Lannacha troopers flew straight up to the deck. It was minutes later, after much pushing, panting, and swearing, that the humans topped that mountainous hull.

Van Rijn glowered about him. "What for hospitality!" he snorted in the Drak'ho language. "Not so much as one little rope let down to me, who is pushing my poor old tired bones to an early grave all for your sakes. Before Heaven, it is hard! It is hard! Sometimes I think I give up, me, and retire. Then where will the galaxy be? Then you will all be sorry, when it is too late."

Theonax gave him a sardonic stare. "You were not the best-behaved guest the Fleet has had, Eart'ho," he answered. "I've a great deal to repay you. Yes. I have not forgotten."

Van Rijn wheezed across the planks to Delp, extending his hand. "So our intelligences was right, and it was you doing all the works," he blared. "I might have been sure. Nobody else in this Fleet has so much near a gram of brains. I, Nicholas van Rijn, compliment you with regards."

Theonax stiffened and his councilors, rigid in braid and sash, looked duly shocked at this ignoring of the admiral. Delp hung back for an instant. Then he took Van Rijn's hand and squeezed it, quite in the Terrestrial manner.

"Lodestar help me, it is good to see your villainous fat face again," he said. "Do you know how nearly you cost me my... everything? Were it not for my lady..."

"Business and friendship we do not mix," said Van Rijn airily. "Ah, yes, good Vrouw Rondonis. How is she and all the little ones? Do they still remember old Uncle Nicholas and the bedtime stories he was telling them, like about the —"

"If you please," said Theonax in an elaborate voice, "we will, with your permission, carry on. Who shall interpret? Yes, I remember you now, Herald." An ugly look. "Your attention, then. Tell your leader that this parley was arranged by my field commander, Delp hyr Orikan, without even sending a messenger down here to consult me. I would have opposed it had I known. It was neither prudent nor necessary. I shall have to have these decks

scrubbed where barbarians have trod. However, since the Fleet is bound by its honor—you do have a word for honor in your language, don't you?—I will hear what your leader has to say."

Tolk nodded curtly and put it into Lannachamael. Trolwen sat up, eyes kindling. His guards growled, their hands tightened on their weapons. Delp shuffled his feet unhappily, and some of Theonax's captains looked away in an embarrassed fashion.

"Tell him," said Trolwen after a moment, with bitter precision, "that we will let the Fleet depart from Achan at once. Of course, we shall want hostages."

Tolk translated. Theonax peeled lips back from teeth and laughed. "They sit here with their wretched handful of rafts and say this to us?" His courtiers tittered an echo.

But his councilors, who captained his flotillas, remained grave. It was Delp who stepped forward and said: "The admiral knows I have taken my share in this war. With these hands, wings, this tail, I have killed enemy males; with these teeth, I have drawn enemy blood. Nevertheless I say now, we'd better at least listen to them."

"What?" Theonax made round eyes. "I *hope* you are joking."

Van Rijn rolled forth. "I got no time for fumblydiddles," he boomed. "You hear me, and I put it in millicredit words so some two-year-old cub can explain it to you. Look out there!" His arm waved broadly at the sea. "We have rafts. Not so many, perhaps, but enough. You make terms with us, or we keep on fighting. Soon it is you who do not have enough rafts. Sol Put that in your pipe and stick it!"

Wace nodded. Good. Good, indeed. Why had that Drak'ho vessel run from his own lubber-manned prize? It was willing enough to exchange long-range shots, or to grapple sailor against sailor in the air. It was not willing to risk being boarded, wrecked, or set ablaze by Lannach's desperate devils.

Because it was a home, a fortress, and a livelihood—the only way to make a living that this culture knew. If you destroyed enough rafts, there would not be enough fish-catching or fish-storing capacity to keep the folk alive. It was as simple as that.

"We'll sink you!" screamed Theonax. He stood up, beating his wings, crest aquiver, tail held like an iron bar. "We'll drown every last whelp of you!"

"Possible so," said Van Rijn. "This is supposed to scare us? If we give up now, we are done for anyhow. So we take you along to hell with us, to shine our shoes and fetch us cool drinks, *nie?*"

Delp said, with trouble in his gaze: "We did not come to Achan for love of destruction, but because hunger drove us. It was you who denied us the right to take fish which you yourselves never caught. Oh, yes, we did take some of your land too, but the water we must have. We can *not* give that up."

Van Rijn shrugged. "There are other seas. Maybe we let you haul a few more nets of fish before you go."

A captain of the Fleet said slowly: "My lord Delp has voiced the crux of the matter. It hints at a solution. After all, the Sea of Achan has little or no value to you Lannach'honai. We did, of course, wish to garrison your coasts, and occupy certain islands which are sources of timber and flint and the like. And naturally, we wanted a port of our own in Sagna Bay, for emergencies and repairs. These are questions of defense and self-sufficiency, not of immediate survival like the water. So perhaps—"

"*No!*" cried Theonax.

It was almost a scream. It shocked them into silence. The admiral crouched panting for a moment, then snarled at Tolk: "Tell your leader... I, the final authority... I refuse. I say we can crush your joke of a navy with small loss to ourselves. We have no reason to yield anything to you. We may allow you to keep the uplands of Lannach. That is the greatest concession you can hope for."

"Impossible!" spat the Herald. Then he rattled the translation off for Trolwen, who arched his back and bit the air.

"The mountains will not support us," explained Tolk more calmly. "We have already eaten them bare—that's no secret. We must have the lowlands. And we are certainly not going to let you hold any land whatsoever, to base an attack on us in a later year."

"If you think you can wipe us off the sea now, without a loss that will cripple you also, you may try," added Wace.

"I say we can!" stormed Theonax. "And will!"

"My lord—" Delp hesitated. His eyes closed for a second. Then he said quite dispassionately: "My lord admiral, a finish fight now would likely be the end of our nation. Such few rafts as survived would be the prey of the first barbarian islanders that chanced along."

"And a retreat into The Ocean would *certainly* doom us," said Theonax. His forefinger stabbed. "Unless you can conjure the trech and the fruitweed out of Achan and into the broad waters."

"That is true, of course, my lord," said Delp.

He turned and sought Trolwen's eyes. They regarded each other steadily, with respect.

"Herald," said Delp, "tell your chief this. We are not going to leave the Sea of Achan. We cannot. If you insist that we do so, we'll fight you and hope you can be destroyed without too much loss to ourselves. We have no choice in that matter."

"But I think maybe we can give up any thought of occupying either Lannach or Holmenach. You can keep all the solid land. We can barter our fish, salt, sea harvest, handicrafts, for your meat, stone, wood, cloth, and oil. It would in time become profitable for both of us."

"And incidental," said Van Rijn, "you might think of this bit too. If Drak'ho has no land, and Lannach has no ships, it will be sort of a little hard for one to make war on another, *nie?* After a few years, trading and getting rich off each other, you get so mutual dependent war is just impossible. So if you agree like now, soon your troubles are over, and then comes Nicholas van Rijn with Earth trade goods for all, like Father Christmas, my prices are so reasonable. What?"

"Be still!" shrieked Theonax.

He grabbed the chief of his guards by a wing and pointed at Delp. "Arrest that traitor!"

"My lord—" Delp backed away. The guard hesitated. Delp's warriors closed in about their captain, menacingly. From the listening lower decks there came a groan.

"The Lodestar hear me," stammered Delp, "I only suggested ... I know the admiral has the final say..."

"And my say is, 'No.'" declared Theonax, tacitly dropping the matter of arrest. "As admiral and Oracle, I forbid it. There is no possible agreement between the Fleet and these... these vile... filthy, dirty, animal..." He dribbled at the lips. His hands curved into claws, poised above his head.

A rustle and murmur went through the ranked Drak'honai. The captains lay like winged leopards, still cloaked with dignity, but there was terror in their eyes. The Lannachska, ignorant of words but sensitive to tones, crowded together and gripped their weapons more tightly.

Tolk translated fast, in a low voice. When he had finished, Trolwen sighed.

"I hate to admit it," he said, "but if you turn that *marsna's* words around, they are true. Do you really, seriously think two races as different as ours could live side by side? It would be too tempting to break the pledges. They could ravage our land while we were gone on migration, take all our towns again... or we could come north once more with barbarian allies, bought with the promise of Drak'ho plunder... We'd be back at each other's throats, one way or another, in five years. Best to have it out now. Let the gods decide who's right and who's too depraved to live."

Almost wearily, he bunched his muscles, to go down fighting if Theonax ended the armistice this moment.

Van Rijn lifted his hands and his voice. It went like a bass drum, the length and breath and depth of the castle raft. And nocked arrows were slowly put back into their quivers.

"Hold still! Wait just a bloody minute, by damn. I am not through talking yet."

He nodded curtly at Delp. "You have some sense, you. Maybe we can find a few others with brains not so much like a spoonful of moldy tea sold by my competitors. I am going to say something now. I will use Drak'ho language. Tolk, you make a running translation. This no one on the planet has heard before. I tell you Drak'ho and Lannacha are *not* alien! They are the same identical stupid race!"

Wace sucked in his breath. "What?" he whispered in Anglic. "But the breeding cycles—"

"Kill me that fat worm!" shouted Theonax.

Van Rijn waved an impatient hand at him. "Be quiet, you. I make the talkings. So! Sit down, both you nations, and listen to Nicholas van Rijn!"

## XX.

THE EVOLUTION of intelligent life on Diomedes is still largely conjectural; there has been no time to hunt fossils. But on the basis of existing biology and general principles, it is possible to reason out the course of millennial events.

Once upon a time in the planet's tropics there was a small continent or large island, thickly forested. The equatorial regions never know the long days and nights of high latitudes: at equinox the sun is up for six hours, to cross the sky and set for another six; at solstice there is a twilight, the sun just above or below the horizon. By Diomedean standards these are ideal conditions which will support abundant life. Among the species at this past epoch there was a small, bright-eyed arboreal carnivore. Like Earth's flying squirrel, it had developed a membrane on which to glide from branch to branch.

But a low-density planet has a queasy structure. Continents rise and sink with indecent speed, a mere few hundreds of thousands of years. Ocean and air currents are correspondingly deflected; and because of the great axial tilt and the larger fluid masses involved, Diomedean currents bear considerably more heat or cold than do Earth's. Thus, even at the equator, there were radical climatic shifts.

A period of drought shriveled the ancient forests into scattered woods separated by great dry pampas. The flying pseudo-squirrel developed true wings to go from copse to copse. But being an adaptable beast, it began also to prey on the new grass-eating animals which herded over the plains. To cope with the big ungulates, it grew in size. But then, needing more food to fuel the larger body, it was forced into a variety of environments, seashore, mountains, swamps—yet by virtue of mobility remained interbred rather than splitting into new species. A single individual might thus face many types of country in one lifetime, which put a premium on intelligence.

At this stage, for some unknown reason, the species—or a part of it, the part destined to become important—was forced out of the homeland. Possibly diastrophism broke the original continent into small islands which would not support so large an animal population; or the drying-out may have progressed still further. Whatever the cause, families and flocks drifted slowly northward and southward through hundreds of generations.

There they found new territories, excellent hunting—but a winter which they could not survive. When the long darkness came, they must perforce return to the tropics to wait for spring. It was not the inborn, automatic reaction

of Terrestrial migratory birds. This animal was already too clever to be an instinct machine; its habits were *learned*. The brutal natural selection of the annual flights stimulated this intelligence yet more.

Now the price of intelligence is a very long childhood in proportion to the total lifespan. Since there is no action-pattern built into the thinker's genes, each generation must learn everything afresh, which takes time. Therefore no species can become intelligent unless it or its environment first produces some mechanism for keeping the parents together, so that they may protect the young during the extended period of helpless infancy and ignorant childhood. Mother love is not enough; Mother will have enough to do, tending the suicidally inquisitive cubs, without having to do all the food-hunting and guarding as well. Father must help out. But what will keep Father around, once his sexual urge has been satisfied?

Instinct can do it. Some birds, for example, employ both parents to rear the young. But elaborate instinctive compulsions are incompatible with intelligence. Father has to have a good selfish reason to stay, if Father has brains enough to *be* selfish.

In the case of man, the mechanism is simple: permanent sexuality. The human is never satisfied at any time of year. From this fact we derive the family, and hence the possibility of prolonged immaturity, and hence our cerebral cortex.

In the case of the Diomedean, there was migration. Each flock had a long and dangerous way to travel every year. It was best to go in company, under some form of organization. At journey's end in the tropics, there was the abandon of the mating season—but soon the unavoidable trip back home, for the equatorial islands would not support many visitors for very long.

Out of this primitive annual grouping—since it was not blindly instinctive, but the fruit of experience in a gifted animal—there grew loose permanent associations. Defensive bands became co-operative bands. Already the exigencies of travel had caused male and female to specialize their body types, one for fighting, one for burden-bearing. It was, therefore, advantageous that the sexes maintain their partnership the whole year around.

The animal of permanent family—on Diomedes, as a rule, a rather large family, an entire matrilineal clan—with the long gestation, the long cubhood, the constant change and challenge of environment, the competition for mates each midwinter with alien bands having alien ways: this animal had every evolutionary reason to start thinking. Out of such a matrix grew language, tools, fire, organized nations, and those vague unattainable yearnings we call "culture."

Now while the Diomedean had no irrevocable pattern of inborn behavior, he did tend everywhere to follow certain modes of life. They were the easiest. Analogously, humankind is not required by instinct to formalize and regulate its matings as marriage, but human societies have almost invariably done so. It is more comfortable for all concerned. And so the Diomedean migrated south to breed.

But he did not have to!

When breeding cycles exist, they are controlled by some simple foolproof mechanism. Thus, for many birds on Earth it is the increasing length of the day in springtime which causes mating: the optical stimulus triggers hormonal processes which reactivate the dormant gonads. On Diomedes, this wouldn't work; the light cycle varies too much with latitude. But once the proto-intelligent Diomedean had gotten into migratory habits—and therefore must breed only at a certain time of the year, if the young were to survive—evolution took the obvious course of making that migration itself the governor.

Ordinarily a hunter, with occasional meals of nuts or fruit or wild grain, the Diomedean exercised in spurts. Migration called for prolonged effort; it must have taken hundreds or thousands of generations to develop the flying muscles alone, time enough to develop other adaptations as well. So this effort stimulated certain glands, which operated through a complex hormonal system to waken the gonads. (An exception was the lactating female, whose mammarys secreted an inhibiting agent.) During the great flight, the sex hormone concentration built up—there was no time or energy to spare for its dissipation. Once in the tropics, rested and fed, the Diomedean made up for lost opportunities. He made up so thoroughly that the return trip had no significant effect on his exhausted glands.

Now and then in the homeland, fleetingly, after some unusual exertion, one might feel stirrings toward the opposite sex. One suppressed that, as rigorously as the human suppresses impulses to incest, and for an even more practical reason: a cub born out of season meant death on migration for itself as well as its mother. Not that the average Diomedean realized this overtly; he just accepted the taboo, founded religions and ethical systems and neuroses on it... However, doubtless the vague, lingering year-round attractiveness of the other sex had been an unconscious reason for the initial development of septs and flocks.

When the migratory Diomedean encountered a tribe which did not observe his most basic moral law, he knew physical horror.

Drak'ho Fleet was one of several which have now been discovered by traders. They may all have originated as groups living near the equator and thus not burdened by the need to travel; but this is still guesswork. The clear fact is that they began to live more off the sea than the land. Through many centuries they elaborated the physical apparatus of ships and tackle, until it had become their entire livelihood.

It gave more security than hunting. It gave a home which could be dwelt in continuously. It gave the possibility of constructing and using elaborate devices, accumulating large libraries, sitting and thinking or debating a problem—in short, the freedom to encumber oneself with a true civilization, which no migrator had except to the most limited degree. On the bad side, it meant grindingly hard labor and aristocratic domination.

This work kept the deckhand sexually stimulated; but warm shelters and stored sea food had made his birthtime independent of the season. Thus the sailor nations grew into a very humanlike pattern of marriage and child-raising: there was even a concept of romantic love.

The migrators, who thought him depraved, the sailor considered swinish. Indeed, neither culture could imagine how the other might even be of the same species.

And how shall one trust the absolute alien?

## XXI.

"IT IS THESE ideological pfluities that make the real nasty wars," said Van Rijn. "But now I have taken off the ideology and we can sensible and friendly settle down to swindling each other, *nie?*"

He had not, of course, explained his hypothesis in such detail. Lannach's philosophers had some vague idea of evolution, but were weak on astronomy; Drak'ho science was almost the reverse. Van Rijn had contented himself with very simple, repetitious words, sketching what must be the only reasonable explanation of the well-known reproductive differences.

He rubbed his hands and chortled into a tautening silence. "So! I have not made it all sweetness. Even I cannot do that overnights. For long times to come yet, you each think the others go about this in disgusting style. You make filthy jokes about each other... I know some good ones you can adapt. But you know, at least, that you are of the same race. Any of you could have been a solid member of the other nation, *nie?* Maybe, come changing times, you start switching around your ways to live. Why not experiment a little, ha? No, no, I see you can not like that idea yet, I say no more."

He folded his arms and waited, bulky, shaggy, ragged, and caked with the grime of weeks. On creaking planks, under a red sun and a low sea wind, the scores of winged warriors and captains shuddered in the face of the unimagined.

Delp said at last, so slow and heavy it did not really break that drumhead silence: "Yes. This makes sense. I believe it."

After another minute, bowing his head toward stone-rigid Theonax: "My lord, this does change the situation. I think—it will not be as much as we hoped for, but better than I feared... We can make terms, they to have all the land and we to have the Sea of Achan. Now that I know they are not... devils... animals... Well, the normal guarantees, oaths and exchange of hostages and so on—should make the treaty firm enough."

Tolk had been whispering in Trolwen's ear. Lannach's commander nodded. "That is much my own thought," he said.

"Can we persuade the Council and the clans, Flockchief?" muttered Tolk.

"Herald, if we bring back an honorable peace, the Council will vote our ghosts godhood after we die."

Tolk's gaze shifted back to Theonax, lying without movement among his courtiers. And the grizzled fur lifted along the Herald's back.

"Let us first return to the Council alive, Flock-chief," he said.

Theonax rose. His wings beat the air, cracking noises like an ax going through bone. His muzzle wrinkled into a lion mask, long teeth gleamed wetly forth, and he roared:

"No! I've heard enough! This farce is at an end!"

Trolwen and the Lannacha escort did not need an interpreter. They clapped hands to weapons and fell into a defensive circle. Their jaws clashed shut automatically, biting the wind.

"My lord!" Delp sprang fully erect.

"Be still!" screeched Theonax. "You've said far too much." His head swung from side to side. "Captains of the Fleet, you have heard how Delp hyr Orikan advocates making peace with creatures lower than the beasts. Remember it!"

"But my lord..." An older officer stood up, hands aloft in protest. "My lord admiral, we've just had it shown to us, they aren't beasts ... it's only a different..."

"Assuming the Eart'ho spoke truth, which is by no means sure, what of it?" Theonax fleered at Van Rijn. "It only makes the matter worse. We know beasts can't help themselves but these Lannach'honai are dirty by choice. And you would let them live? You would... would *trade* with them... enter their towns... let your young be seduced into their... No!"

The captains looked at each other. It was like an audible groan. Only Delp seemed to have the courage to speak again.

"I humbly beg the admiral to recall, we've no real choice. If we fight them to a finish, it may be our own finish too."

"Ridiculous!" snorted Theonax. "Either you are afraid or they've bribed you."

Tolk had been translating *sotto voce* for Trolwen. Now, sickly, Wace heard the commander's grim reply to his Herald: "If he takes that attitude, a treaty is out of the question. Even if he made it, he'd sacrifice his hostages to us—not to speak of ours to him—just to renew the war whenever he felt ready. Let's get back before I myself violate the truce!"

*And there, thought Wace, is the end of the world. I will die under flung stones, and Sandra will die in Glacier Land. Well... we tried.*

He braced himself. The admiral might not let this embassy depart.

Delp was looking around from face to face. "Captains of the Fleet," he cried, "I ask your opinion... I implore you, persuade my lord admiral that..."

"The next treasonable word uttered by anyone will cost him his wings," shouted Theonax. "Or do you question my authority?"

It was a bold move, thought Wace in a distant part of his thudding brain—to stake all he had on that one challenge. But of course, Theonax was going to get away with it; no one in this caste-ridden society would deny his absolute power, not even Delp the bold. Reluctant they might be, but the captains would obey.

The silence grew shattering.

Nicholas van Rijn broke it with a long, juicy Bronx cheer.

The whole assembly started. Theonax leaped backward and for a moment he was like a bat-winged tomcat.

"What was that?" he blazed.

"Are you deaf?" answered Van Rijn mildly. "I said—" He repeated with tremolo.

"What do you mean?"

"It is an Earth term," said Van Rijn. "As near as I can render it, let me see... well, it means you are a—"

The rest was the most imaginative obscenity Wace had heard in his life.

The captains gasped. Some drew their weapons. The Drak'ho guards on the upper decks gripped bows and spears. "Kill him!" screamed Theonax.

"No!" Van Rijn's bass exploded on their ears. The sheer volume of it paralyzed them. "I am an embassy, by damn! You hurt an embassy and the Lodestar will sink you in hell's boiling seas!"

It checked them. Theonax did not repeat his order; the guards jerked back toward stillness; the officers remained poised, outraged past words.

"I have somethings to say you," Van Rijn continued, only twice as loud as a large foghorn. "I speak to all the Fleet, and ask you ask yourselves, why this little pip squeaker does so stupid. He makes you carry on a war where both sides lose—he makes you risk your lives, your wives and cubs, maybe the Fleet's own surviving—why? Because he is afraid. He knows, a few years cheek by jowl next to the Lannach'honai, and even more so trading with my company at my fantastic low prices, things begin to change. You get more into thinking by your own selves. You taste freedom. Bit by bit, his power slides from him. And he is too much a coward to live on his own self. *Nie*, he has got to have guards and slaves and all of you to make bossing over, so he proves to himself he is not just a little jellypot but a real true Leader. Rather he will have the Fleet ruined, even die himself, than lose this prop up, him!"

Theonax said, shaking: "Get off my raft before I forget there is an armistice."

"Oh, I go, I go," said Van Rijn. He advanced toward the admiral. His tread reverberated in the deck. "I go back and make war again if you insist. But only one small question I ask first." He stopped before the royal presence and prodded the royal nose with a hairy forefinger. "Why you make so much fuss about Lannacha home lifes? Could be maybe down underneath you hanker to try it yourself?"

He turned his back, then, and bowed.

Wace did not see just what happened. There were guards and captains between. He heard a screech, a bellow from Van Rijn, and then there was a hurricane of wings before him.

Something... He threw himself into the press of bodies. A tail crashed against his ribs. He hardly felt it; his fist jolted, merely to get a warrior out of the way and see—

Nicholas van Rijn stood with both hands in the air as a score of spears menaced him. "The admiral bit me!" he wailed. "I am here like an embassy, and the pig bites me! What kind of relations between countries is that, when heads of state bite foreign ambassadors, ha? Does an Earth president bite diplomats? This is uncivilized!"

Theonax backed off, spitting, scrubbing the blood from his jaws. "Get out," he said in a strangled voice. "Go at once."

Van Rijn nodded. "Come, friends," he said. "We find us places with better manners."

"Freeman... Freeman, where did he..." Wace crowded close.

"Never mind where," said Van Rijn huffily.

Trolwen and Tolk joined them. The Lannacha escort fell into step behind. They walked at a measured pace across the deck, away from the confusion of Drak'honai under the castle wall.

"You might have known it," said Wace. He felt exhausted, drained of everything except a weak anger at his chief's unbelievable folly. "This race is carnivorous. Haven't you seen them snap when they get angry? It's... a reflex... You might have known!"

"Well," said Van Rijn in a most virtuous tone, holding both hands to his injury, "he did not *have* to bite. I am not responsible for his lack of control or any consequences of it, me. All good lawyer saints witness I am not."

"But the ruckus—we could all have been killed!"

Van Rijn didn't bother to argue about that.

Delp met them at the rail. His crest drooped. "I am sorry it must end thus," he said. "We could have been friends."

"Perhaps it does not end just so soon," said Van Rijn.

"What do you mean?" Tired eyes regarded him without hope.

"Maybe you see pretty quick. Delp"—Van Rijn laid a paternal hand on the Drak'ho's shoulder—"you are a good young chap. I could use a one like you, as a part-time agent for some tradings in these parts. On fat commissions, natural. But for now, remember you are the one they all like and respect. If anything happens to the admiral, there will be panic and uncertainty... they will turn to you for advice. If you act fast at such a moment, you can be admiral yourself! Then maybe we do business, ha?"

He left Delp gaping and swung himself with apish speed down into the canoe. "Now, boys," he said, "row like hell."

They were almost back to their own fleet when Wace saw clotted wings whirl up from the royal raft. He gulped. "Has the attack... has it begun already?" He cursed himself that his voice should be an idiotic squeak.

"Well, I am glad we are not close to them." Van Rijn, standing up as he had done the whole trip, nodded complacently. "But I think not this is the war. I think they are just disturbed. Soon Delp will take charge and calms them down."

"But—Delp?"

Van Rijn shrugged. "If Diomedean proteins is deadly to us," he said, "ours should not be so good for them, ha? And our late friend Theonax took a big mouthful of me. It all goes to show, these foul tempers only lead to trouble. Best you follow my example. When I am attacked, I turn the other cheek."

## XXII.

THURSDAY LANDING had little in the way of hospital facilities: an autodiagnostician, a few surgical and therapeutical robots, the standard drugs, and the post xenobiologist to double as medical officer. But a six weeks' fast did not have serious consequences, if you were strong to begin with and had been waited on hand, foot, wing, and tail by two anxious nations, on a planet none of whose diseases could affect you. Treatment progressed rapidly with the help of bioaccelerine, from intravenous glucose to thick rare steaks. By the sixth Diomedean day, Wace had put on a noticeable amount of flesh and was weakly but fumingly aprowl in his room.

"Smoke, sir?" asked young Senegal. He had been out on trading circuit when the rescue party arrived; only now was he getting the full account. He offered cigarettes with a most respectful air.

Wace halted, the bathrobe swirling about his knees. He reached, hesitated, then grinned and said: "In all that time without tobacco, I seem to've lost the addiction. Question is, should I go to the trouble and expense of building it up again?"

"Well, no, sir—"

"Hey! Gimme that!" Wace sat down on his bed and took a cautious puff. "I certainly am going to pick up all my vices where I left off, and doubtless add some new ones."

"You, uh, you were going to tell me, sir... how the station here was informed—"

"Oh, yes. That. It was childishly simple. I figured it out in ten minutes, once we got a breathing spell. Send a fair-size Diomedean party with a written message, plus of course one of Tolk's professional interpreters to help them inquire their way on this side of The Ocean. Devise a big life raft, just a framework of light poles which could be dovetailed together. Each Diomedean carried a single piece; they assembled it in the air and rested on it whenever necessary. Also fished from it: a number of Fleet experts went along to take charge of that angle. There was enough rain for them to catch in small buckets to drink—I knew there would be, since the Drak'honai stay at sea for indefinite periods, and also this is such a rainy planet anyhow.

"Incidentally, for reasons which are now obvious to you, the party had to include some Lannacha females. Which means that the messengers of both nationalities have had to give up some hoary prejudices. In the long run, that's going to change their history more than whatever impression we Terrestrials might have made, by such stunts as flying them home across The Ocean in a single day. From now on, willy-nilly, the beings who went on that trip will be a subversive element in both cultures; they'll be the seedbed of Diomedean internationalism. But that's for the League to gloat about, not me."

Wace shrugged. "Having seen them off," he finished, "we could only crawl into bed and wait. After the first few days, it wasn't so bad. Appetite disappears."

He stubbed out the cigarette with a grimace. It was making him dizzy.

"When do I get to see the others?" he demanded. "I'm strong enough now to feel bored. I want company, dammit."

"As a matter of fact, sir," said Senegal, "I believe Freeman van Rijn said something about"—a thunderous "*Skulls and smallpox!*" bounced in the corridor outside—"visiting you today."

"Run along then," said Wace sardonically. "You're too young to hear this. We blood brothers, who have defied death together, we sworn comrades, and so on and so forth, are about to have a reunion."

He got to his feet as the boy slipped out the back door. Van Rijn rolled in the front entrance.

His Jovian girth was shrunken flat, he had only one chin, and he leaned on a gold-headed cane. But his hair was curled into oily black ringlets, his mustaches and goatee waxed to needle points, his lace-trimmed shirt and cloth-of-gold vest were already smeared with snuff, his legs were hairy tree trunks beneath a batik sarong, he wore a diamond

mine on each hand and a silver chain about his neck which could have anchored a battleship. He waved a ripe Trichinopoly cigar above a four-decker sandwich and roared:

"So you are walking again. Good fellow! The only way you get well is not sip dishwater soup and take it easily, like that upgebungled horse doctor has the nerve to tell me to do." He purpled with indignation. "Does one thought get through that sand in his synapses, what it is costing me every hour I wait here? What a killing I can make if I get home among those underhand competition jackals before the news reaches them Nicholas van Rijn is alive after all? I have just been out beating the station engineer over his thick flat mushroom he uses for a head, telling him if my spaceship is not ready to leave tomorrow noon I will hitch him to it and say giddap. So you will come back to Earth with us your own selfs, *nie?*"

Wace had no immediate reply. Sandra had followed the merchant in.

She was driving a wheelchair, and looked so white and thin that his heart cracked over. Her hair was a pale frosty cloud on the pillow, it seemed as if it would be cold to touch. But her eyes lived, immense, the infinite warm green of Earth's gentlest seas; and she smiled at him.

"My lady—" he whispered.

"Oh, she comes too," said Van Rijn, selecting an apple from the fruit basket at Wace's bedside. "We all continue our interrupted trip, maybe with not so much fun and games aboard—" He drooped one little sleet-gray eye at her, lasciviously. "Those we save for later on Earth when we are back to normal, ha?"

"If my lady has the strength to travel—" stumbled Wace. He sat down, his knees would bear him no longer.

"Oh, yes," she murmured. "It is only a matter of following the diet as written for me and getting much rest."

"Worst thing you can do, by damn," grumbled Van Rijn, finishing the apple and picking up an orange.

"It isn't suitable," protested Wace. "We lost so many servants when the skycruiser ditched. She'd only have—"

"A single maid to attend me?" Sandra's laugh was ghostly, but it held genuine amusement. "After now I am to forget what we did and endured, and be so correct and formal with you, Eric? That would be most silly, when we have climbed the ridge over Salmenbrok together, not?"

Wace's pulse clamored. Van Rijn, strewing orange peel on the floor, said: "Out of hard lucks, the good Lord can pull much money if He chooses. I cannot know every man in the company, so promising youngsters like you do go sometimes to waste on little outposts like here. Now I will take you home to Earth and find a proper paying job for you."

If *she* could remember one chilled morning beneath Mount Oborch, thought Wace, he, for the sake of his manhood, could remember less pleasant things, and name them in plain words. It was time.

He was still too weak to rise—he shook a little—but he caught Van Rijn's gaze and said in a voice hard with anger:

"That's the easiest way to get back your self-esteem, of course. Buy it! Bribe me with a sinecure to forget how Sandra sat with a paintbrush in a coalsack of a room, till she fainted from exhaustion, and how she gave us her last food... how I myself worked my brain and my heart out to pull us all back from that jailhouse country and win a war to boot... No, don't interrupt. I know you had some part in it. You fought during that naval engagement: because you had no choice, no place to hide. You found a nice nasty way to dispose of an inconvenient obstacle to the peace negotiations. You have a talent for that sort of thing. And you made some suggestions.

"But what did it amount to? It amount to your saying to me: 'Do this! Build that!' And I had to do it, with nonhuman helpers and stone-age tools. I had to design it, even! Any fool could once have said, 'Take me to the Moon.' It took brains to figure out how!

"Your role, your 'leadership,' amounted to strolling around, gambling and chattering, playing cheap politics, eating like a hippopotamus while Sandra lay starving on Dawnach—and claiming all the credit! And now I'm supposed to go to Earth, sit down in a gilded pigpen of an office, spend the rest of my life thumb-twiddling... and keep quiet when you brag. Isn't that right? You and your sinecure—"

Wace saw Sandra's eyes on him, grave, oddly compassionate, and jerked to a halt.

"I quit," he ended.

Van Rijn had swallowed the orange and returned to his sandwich during Wace's speech. Now he burped, licked his fingers, took a fresh puff of his cigar, and rumbled quite mildly:

"If you think I give away sinecures, you are being too optimist. I am offering you a job with importance for no reason except I think you can do it better than some knucklebone heads on Earth. I will pay you what the job is worth. And by damn, you will work your promontory off."

Wace gulped after air.

"Go ahead and insult me, public if you wish," said Van Rijn. "Just not on company time. Now I go find me who it was put the bomb in that cruiser and take care of him. Also maybe the cook will fix me a little Italian hero sandwich. Death and dynamite, they want to starve me to bones here, them!"

He waved a shaggy paw and departed like an amiable earthquake.

Sandra wheeled over and laid on a hand on Wace's. It was a cool touch, light as a leaf falling in a northern October, but it burned him. As if from far off, he heard her:

"I awaited this to come, Eric. It is best you understand now. I, who was born to govern... my whole life has been a long governing, not?... I know what I speak of. There are the fake leaders, the balloons, with talent only to get in people's way. Yes. But he is not one of them. Without him, you and I would sleep dead beneath Achan."

"But—"

"You complain he made you do the hard things that used your talent, not his? Of course he did. It is not the leader's job to do everything himself. It is his job to order, persuade, wheedle, bully, bribe—just that, to make people do what must be done, whether or not they think it is possible.

"You say, he spent time loafing around talking, making jokes and a false front to impress the natives? Of course! Somebody had to. We were monsters, strangers, beggars as well. Could you or I have started as a deformed beggar and ended as all but king?

"You say he bribed—with goods from crooked dice—and blustered, lied, cheated, politicked, killed both open and sly? Yes. I do not say it was right. I do not say he did not enjoy himself, either. But can you name another way to have gotten our lives back? Or even to make peace for those poor warring devils?"

"Well... well..."The man looked away, out the window to the stark landscape. It would be good to dwell inside Earth's narrower horizon.

"Well, maybe," he said at last, grudging each word. "I... I suppose I was too hasty. Still—we played our parts too, you know. Without us, he..."

"I think, without us, he would have found some other way to come home," she interrupted. "But we without him, no."

He jerked his head back. Her face was burning a deeper red than the ember sunlight outside could tinge it.

He thought, with sudden weariness: *After all, she is a woman, and women live more for the next generation than men can. Most especially she does, for the life of a planet may rest on her child, and she is an aristocrat in the old pure meaning of the word. He who fathers the next Duke of Hermes may be aging, fat, and uncouth; callous and conscienceless; unable to see her as anything but a boisterous episode. It doesn't matter, if the woman and the aristocrat see him as a man.*

*Well-a-day, I have much to thank them both for.*

"I—" Sandra looked confused, almost trapped. Her look held an inarticulate pleading. "I think I had best go and let you rest." After a moment of his silence: "He is not yet so strong as he claims. I may be needed."

"No," said Wace with an enormous tenderness. "The need is all yours. Good-by, my lady."

**THE END**

## **THE MAN WHO COUNTS AND THE TECHNIC CIVILIZATION SERIES**

*THE MAN WHO COUNTS* answers the question implicit in its title: who *is* the man who counts? What personal qualities must such a man have? Poul Anderson explores the issue by cleverly inverting hallowed pulp fiction clichés. The result is an adventure story far more intelligent than any conventional tale of sober and muscular virtue triumphant.

Anderson accomplishes his purpose by successive doses of misdirection and correction. He quickly engages our sympathy for the principal viewpoint character, Eric Wace. This stalwart young engineer, blue of eye and strong of jaw, is the presumptive hero. Wace seems all the nobler in contrast to his "aging, fat, and uncouth, callous and conscienceless" employer, Nicholas van Rijn. This merchant prince is lecherous, while Wace is prudish; devious while Wace is blunt; and flamboyant while Wace is restrained. He tweaks Wace's idealism with remarks like "cowards make the best strategists." His malaprops and fractured syntax assault Wace's ears. His noisy self-pity and superstitious piety jar Wace's sensibilities. In short, everything about van Rijn, even his waxed mustaches and greasy black ringlets, encourages us to see him playing Comic Antagonist to Wace's Heroic Protagonist. But after establishing these biases in the opening chapters, the author spends the rest of the novel demolishing them with delicious irony. True heroes need not seem the least bit Heroic—or even nice.

Anderson measures our initial responses to the characters against their performance under the stress of shipwreck on an alien planet. The marooned humans must get help before they starve or perish in a war between two native peoples.

The crisis demonstrates Wace's strength and skill but at the same time exposes the shortcomings of his cautious, unimaginative nature. Van Rijn, however, is not limited to the capabilities of his own hands and mind, forceful as these actually are. He knows how to multiply his power: "My job is not to do what is impossible, it is to make others do it for me." He is a charismatic manager, but Wace is too obtuse to appreciate this talent: "You bloated leech, do you expect to be carried home by my labor and my brains and fob me off with another factor's job on another hell-planet?" He short-sightedly rates his efforts building ice ships above van Rijn's imagining them. (The flagship of this bizarre fleet, the *Rijsttafel*, takes its name from a lavish spread of Dutch-Indonesian style curry, as a nod to van Rijn's ancestry.)

Wace and van Rijn struggle for more than survival. The more effective man will win the favor of Sandra Tamarin, the third castaway. Tamarin, heiress to a planet-sized duchy, is seeking the best possible mate in order to forestall a political crisis on her home world. She departs from the pulp formulas which demanded that heroines be either clinging damsels or haughty amazons. Instead, Tamarin is consistently wiser, steadier, more perceptive and sophisticated than Wace. She saves his life in battle, sacrifices her rations to keep him functioning, and patiently endures his bumbling attempts at chivalry. Her competence and bravery are typical of Anderson's heroines. (The same traits appear in Rodnis sa Axollon, a local alien female who boasts of her sex, "We are the strong ones.")

External and internal problems running in parallel constitute the author's favorite plot structure. In *The Man Who Counts* he also superimposes the physical and personal struggles of the humans upon those of the native Diomedean.

The humans' aircraft has crashed in an area where two groups of winged autochthones are fighting for their existence. The sea-roving Fleet of Drak'ho has invaded and nearly conquered the land-based Great Flock of Lannach. The process resembles the impact of European colonists on tribal societies in Africa, the Americas, and Oceania. The culture of the patrilineal, aristocratic, work-oriented Fleet is antagonistic to that of the matrilineal, egalitarian, leisure-oriented Flock. Moreover, there is a biological divergence which makes each an abomination to the other: the fleet experiences year-round sexual desire and the Flock seasonal. (This same psychological revulsion is a key element in Ursula K. Le Guin's *Left Hand of Darkness*, 1969, published eleven years after *The Man Who Counts'* original publication in *Astounding Science Fiction* magazine.) And aside from these group hostilities, the aliens are also real individuals with private rivalries of their own.

Embroidering humans in this conflict gives the author the opportunity to dramatize questions of cultural and biological determinism. Van Rijn is able to understand and manipulate both races of Diomedean because experience has made him extraordinarily flexible. His persuasive skills can charm almost any kind of intelligent creature. Wace and Tamarin, on the other hand, feel the effects of their backgrounds. His class-consciousness makes him socially awkward. An aristocratic upbringing has instilled dignity in her. As she remarks, "The high-born of Hermes have their customs and taboos, also for the correct way to die. What else is man if not a set of customs and taboos?" Danger gives both of them as well as the Diomedean opportunities to move beyond the horizons of their cultures.

Van Rijn is also ingenious in exploiting the biochemical aspects of their situation. Knowing that human and Diomedean proteins are incompatible lets him bring the adventure to its low-comedy climax. Eventually all parties learn that biology is a more fundamental reality than culture, whether the survival of individuals or whole people is at stake.

Biology and anthropology are only two of the many types of knowledge Anderson used in the construction of Diomedes. *The Man Who Counts* was the author's earliest novel-length attempt at worldsmithing, a craft which he practiced superbly. Creating an entire extraterrestrial world from the astronomical specifications of its sun to the myths of its sophonts is one of the joys of writing science fiction. Anderson communicates the sheer delight of this

intellectual game in his essay "The Creation of Imaginary Worlds: The World-Builder's Handbook and Pocket Companion" for Reginald Bretnor's *Science Fiction, Today and Tomorrow* (New York: Harper & Row, 1974).

The careful thought that went into *The Man Who Counts* is an Anderson trademark. He deplores clumsy science fiction which gives us "either a world exactly like our own except for having neither geography nor history, or else... an unbelievable mishmash which merely shows us that still another writer couldn't be bothered to do his homework."

Anderson has assigned Diomedes to a suitable size and type of sun, chosen its size, mass, and atmosphere, calculated its orbit, period of rotation, and axial tilt, devised its weather, drawn its maps, seeded it with unique flora and fauna, traced the physical and cultural evolution of its sentient life-form, and as a final touch, bestowed splendid proper names as needed. None of these parameters is arbitrary, each contributes content to the story. The dense atmosphere makes winged sophonts possible; the extent of the polar circles forces them to migrate; the lack of heavy metals restricts them to a Stone Age technology; and so forth.

The native Diomedians themselves are the most interesting creation of all. They belong to a class of six-limbed creatures Anderson terms "cherubim." But it is not enough to design alien bodies without alien personalities inside them. The kinds of gestures Diomedians use reveal their non-humanness. In the opening chapter alone, we are shown their signs for surprise, anger, challenge, reproach, and submission. One punitive practice is also mentioned—Diomedians cut off the wings of vanquished enemies to shame them.

The opposing cultures of Fleet and Flock are plausible. Their separate ways of breeding, making, and thinking shape consistent behavioral patterns. For instance, the Fleet enjoys the higher level of technology—won by proportionately greater effort—but economic pressures have made the Drak'honai status-conscious and individualistic. But since the Flock does not need to struggle as hard to survive, the Lannachska are more casual and group-oriented. Even trivial details spotlight cultural differences. Among the Flock, "motherless" is the insult equivalent to "bastard," a concept only Fleet members would understand.

Each people has its own form of religion. The Flock follows a non-speculative system of ancestral rituals comparable to Shinto. The Fleet, on the other hand, is formally monotheistic despite traces of earlier paganism, a situation analogous to that of Christianity in medieval Europe or Zoroastrianism in ancient Persia. The author realizes differences exist within species as well as between them.

The Diomedians did not exhaust Anderson's fascination with winged sophonts. Fifteen years later, in response to a challenge by John Campbell to design a post-mammalian being, he created the magnificent Ythrians for *The People of the Wind* (1973) and other stories. Intervening experience had honed his skills so well that the newer work is scientifically and aesthetically richer.

Yet events in the two novels are connected, for they belong to the same future history series. Van Rijn's protégé and grandson-in-law David Falkayn founds the colony on Avalon, the setting of *The People of the Wind*. In that story, Falkayn's granddaughter has an affair with an ancestor of Dominic Flandry, flawed hero of the series' later installments. Flandry's lost beloved from *The Rebel Worlds* is a foremother of the people encountered in the final episode, "Starfog," set about 4700 years after the birth of van Rijn.

Such are the internal plot strands connecting Anderson's major future history, the Technic Civilization series, Anderson's distaste for self-advertisement has tended to obscure the scope of this enterprise: more than 40 separate titles including 13 novels covering five millennia, published over the course of 34 years. Baen Books is bringing all these works together for the very first time in seven matching volumes.

Anderson's earlier future history, the Psychotechnic League series, dealt with political changes on Earth, the settlement of the solar system and the beginnings of interstellar expansion. It had to be terminated in 1966 after 20 items in 19 years because, as Anderson explained, "World War II didn't start on schedule." The headaches of organizing the necessary volume of data for future histories led the author to remark that constructing a perfectly consistent secondary universe would be fine therapy for a mental patient afflicted with delusions of godhood.

As outlined the accompanying chronology, the theme of the Technic Civilization series is the cyclic rise and fall of civilization. This is not an exercise in prediction but "it is assumed that the same kind of human follies as the real past has known will continue through the future for a long time to come, with the same resultant pattern." This is the framework supporting a wonderful kaleidoscope of future societies spread across the stars.

The series opens in the near future with "The Saturn Game" (winner of the 1982 Hugo and Nebula awards for best novella). Enough of this century's problems have been solved to allow significant numbers of people to move into space. Earth and her colonies confederate in the Commonwealth.

A faster-than-light drive and other discoveries permit far-ranging interstellar exploration. Among the alien races contacted are the Ythrians (in "Wings of Victory" and "The Problem of Pain"). Human colonists scatter across the starways and begin diversifying into unique societies, a process called the Breakup.

This period resembles Europe's Age of Exploration of the sixteenth and seventh centuries. In both cases expansion breeds enormous trade profits and merchant princes to harvest them. Here the companies form a mutual-assistance organization more powerful than any government—the Polesotechnic League. (The name was coined by Poul's wife Karen from the Greek for "selling skills".) Greed and ambition corrupt the League, transforming its free-enterprise companies into ruthless cartels.

Nicholas van Rijn, who is partly modeled on seventeenth century Danish king Christian IV thrives in this turbulent period. He has profitable adventures in his own person ("Margin of Profit," *The Man Who Counts*, "Hiding

Place," "Territory") and directs those of subordinates ("The Master Key," "The Three-Cornered Wheel," "A Sun Invisible," "The Trouble Twisters," "Day of Burning," "Esau"). He staunchly disclaims any motive beyond self-interest despite the many beneficial effects of his actions until forced to admit the claims of conscience near the end of his life (*Satan's World*, "Lodestar" and *Mirkebeim*). Van Rijn is usually considered an unvarying "template character" but he does grow progressively more somber with age. Other stories from the same general period are: "How to Be Ethnic in One Easy Lesson," "A Little Knowledge," and "The Season of Forgiveness."

Just before the League collapses and the chaotic Time of Troubles begins, David Falkayn establishes the joint human-Ythrian colony on Avalon ("Rescue on Avalon" and "Wingless on Avalon"). New worlds everywhere must defend themselves or perish.

Peace slowly returns under the aegis of the Terran Empire ("The Star Plunderer" and "Sargasso of Lost Starships"). The expanding Empire absorbs many star systems but Avalon successfully resists conquest (*The People of the Wind*). Eventually the Empire collides with a younger and fiercer imperium, the Roidhunate of Merseia, which would never have come into existence save for Falkayn's actions in "Day of Burning."

The decaying Empire is propped up for a while by men like Dominic Flandry in *Ensign Flandry*, *A Circus of Hells*, *The Rebel Worlds*, "Tiger by the Tail," "Honorable Enemies," "The Game of Glory," "A Message in Secret," *A Plague of Masters*, *Hunters of the Sky Cave*, "Warriors from Nowhere," *A Knight of Ghosts and Shadows* (which includes scenes on Diomedes where the effects of events in *War of the Wing-Men* are still being felt centuries later), and *A Stone in Heaven*. Other heroes also do their part ("Outpost of Empire" and *The Day of Their Return*). But inevitably the Terrans and Merseians exhaust each other into oblivion. The Long Night falls.

Surviving islands of civilization, human and non-human, renew interstellar contact ("Tragedy of Errors," "The Night Face," and "The Sharing of Flesh," winner of the 1969 novelette Hugo.) The new modes of life developing may prove freer, richer and more durable than the old ways of Technic Civilization ("Starfog").

*The Man Who Counts* can be read as the earliest novel-length item in a sprawling series or as a historically important component of that series because it marks the first fully rounded appearance of Anderson's most popular character. (The van Rijn in "Margin of Profit" is a malaprop-less shadow of the scalawag to come.) It is also the author's first systematic venture in world-building, a promise of subsequent marvels in this series and elsewhere. Finally, it is enjoyable in its own right as a lively, convention-toppling adventure yarn. On all these levels, art weds knowledge to produce those fresh wonders that are the special province of science fiction.

—Sandra Miesel  
Indianapolis

## HIDING PLACE

CAPTAIN BAHADUR TORRANCE received the news as befitted a Lodgemaster in the Federated Brotherhood of Spacemen. He heard it out, interrupting only with a few knowledgeable questions. At the end, he said calmly, "Well done, Freeman Yamamura. Please keep this to yourself till further notice. I'll think about what's to be done. Carry on." But when the engineer officer had left the cabin—the news had not been the sort you tell on the intercom—he poured himself a triple whiskey, sat down, and stared empty at the viewscreen.

He had traveled far, seen much, and been well rewarded. However, promotion being swift in his difficult line of work, he was still too young not to feel cold at hearing his death sentence.

The screen showed such a multitude of stars, hard and winter-brilliant, that only an astronaut could recognize individuals. Torrance sought past the Milky Way until he identified Polaris. Then Valhalla would lie so-and-so many degrees away, in *that* direction. Not that he could see a type-G sun at this distance, without optical instruments more powerful than any aboard the *Hebe G.B.* But he found a certain comfort in knowing his eyes were sighted toward the nearest League base (houses, ships, humans, nestled in a green valley on Freya) in this almost uncharted section of our galactic arm. Especially when he didn't expect to land there, ever again.

The ship hummed around him, pulsing in and out of four-space with a quasi-speed that left light far behind and yet was still too slow to save him.

Well... it became the captain to think first of the others. Torrance sighed and stood up. He spent a moment checking his appearance; morale was important, never more so than now. Rather than the usual gray coverall of shipboard, he preferred full uniform: blue tunic, white cape and culottes, gold braid. As a citizen of Ramanujan planet, he kept a turban on his dark aquiline head, pinned with the Ship-and-Sunburst of the Polesotechnic League.

He went down a passageway to the owner's suite. The steward was just leaving, a tray in his hand. Torrance signaled the door to remain open, clicked his heels and bowed. "I pray pardon for the interruption, sir," he said. "May I speak privately with you? Urgent."

Nicholas van Rijn hoisted the two-liter tankard which had been brought him. His several chins quivered under the stiff goatee; the noise of his gulping filled the room, from the desk littered with papers to the Huy Brasealian jewel-tapestry hung on the opposite bulkhead. Something by Mozart lilted out of a taper. Blond, big-eyed, and thoroughly three-dimensional, Jeri Kofoed curled on a couch, within easy reach of him where he sprawled in his lounge. Torrance, who was married but had been away from home for some time, forced his gaze back to the merchant.

"Ahhh!" Van Rijn banged the empty mug down on a table and wiped foam from his mustaches. "Pox and pestilence, but the first beer of the day is good! Something with it is so quite cool and—um—by damn, what word do I want?" He thumped his sloping forehead with one hairy fist. "I get more absent in the mind every week. Ah, Torrance, when you are too a poor old lonely fat man with all powers failing him, you will look back and remember me and wish you was more good to me. But then is too late." He sighed like a minor tornado and scratched the pelt on his chest. In the near tropic temperature at which he insisted on maintaining his quarters, he need wrap only a sarong about his huge body. "Well, what begobbled stupiding is it I must be dragged from my-all-too-much work to fix up for you, ha?"

His tone was genial. He had, in fact, been in a good mood ever since they escaped the Adderkops. (Who wouldn't be? For a mere space yacht, even an armed one with ultrapowered engines, to get away from three cruisers, was more than an accomplishment; it was very nearly a miracle. Van Rijn still kept four grateful candles burning before his Martian sandroot statuette of St. Dismas.) True, he sometimes threw crockery at the steward when a drink arrived later than he wished, and he fired everybody aboard ship at least once a day. But that was normal.

Jeri Kofoed arched her brows. "Your first beer, Nicky?" she murmured. "Now really! Two hours ago—"

"*Ja*, but that was before midnight time. If not Greenwich midnight, then surely on some planet somewhere, *nie?* So is a new day." Van Rijn took his churchwarden off the table and began stuffing it. "Well, sit down, Captain Torrance, make yourself to be comfortable and lend me your lighter. You look like a dynamited custard, boy. All you youngsters got no stamina. When I was a working spaceman, by Judas, we made solve all our own problems. These days, death and damnation, you come ask me how to wipe your noses! Nobody has any guts but me." He slapped his barrel belly. "So what is be-jingle-bang gone wrong now?"

Torrance wet his lips. "I'd rather speak to you alone, sir."

He saw the color leave Jeri's face. She was no coward. Frontier planets, even the pleasant ones like Freya, didn't breed that sort. She had come along on what she knew would be a hazardous trip because a chance like this—to get an in with the merchant prince of the Solar Spice & Liquors Company, which was one of the major forces within the whole Polesotechnic League—was too good for an opportunistic girl to refuse. She had kept her nerve during the fight and the subsequent escape, though death came very close. But they were still far from her planet, among unknown stars, with the enemy hunting them.

"So go in the bedroom," Van Rijn ordered her.

"Please," she whispered. "I'd be happier hearing the truth."

The small black eyes, set close to Van Rijn's hook nose, flared. "Foulness and fulminate!" he bellowed. "What is this poppies with cocking? When I say frog, by billy damn, you jump!"

She sprang to her feet, mutinous. Without rising, he slapped her on the appropriate spot. It sounded like a pistol going off. She gasped, choked back an indignant screech, and stamped into the inner suite. Van Rijn rang for the steward.

"More beer this calls for," he said to Torrance. "Well, don't stand there making bug's eyes! I got no time for fumblydiddles, even if you overpaid loafer do. I got to make revises of all price schedules on pepper and nutmeg for Freya before we get there. Satan and stench! At least ten percent more that idiot of a factor could charge them, and not reduce volume of sales. I swear it! All good saints, hear me and help a poor old man saddled with oatmeal-brained squatpots for workers!"

Torrance curbed his temper with an effort. "Very well, sir. I just had a report from Yamamura. You know we took a near miss during the fight, which hulled us at the engine room. The converter didn't seem damaged, but after patching the hole, the gang's been checking to make sure. And it turns out that about half the circuitry for the infrashield generator was fused. We can't replace more than a fraction of it. If we continue to run at full quasi-speed, we'll burn out the whole converter in another fifty hours."

"Ah, s-s-so." Van Rijn grew serious. The snap of the lighter, as he touched it to his pipe, came startlingly loud. "No chance of stopping altogether to make fixings? Once out of hyperdrive, we would be much too small a thing for the bestinkered Adderkops to find. Hey?"

"No, sir. I said we haven't enough replacement parts. This is a yacht, not a warship."

"Hokay, we must continue in hyperdrive. How slow must we go, to make sure we come within calling distance of Freya before our engine burns out?"

"One-tenth of top speed. It'd take us six months."

"No, my captain friend, not so long. We never reach Valhalla star at all. The Adderkops find us first."

"I suppose so. We haven't got six months' stores aboard anyway." Torrance stared at the deck. "What occurs to me is, well, we could reach one of the nearby stars. There just barely might be a planet with an industrial civilization, whose people could eventually be taught to make the circuits we need. A habitable planet, at least—maybe..."

"*Nie!*" Van Rijn shook his head till the greasy black ringlets swirled about his shoulders. "All us men and one woman, for life on some garbagey rock where they have not even wine grapes? I'll take an Adderkop shell and go out like a gentleman, by damn!" The steward appeared. "Where you been snoozing? Beer, with God's curses on you! I need to make thinks! How you expect I can think with a mouth like a desert in midsummer?"

Torrance chose his words carefully. Van Rijn would have to be reminded that the captain, in space, was the final boss. And yet the old devil must not be antagonized, for he had a record of squirming between the horns of dilemmas. "I'm open to suggestions, sir, but I can't take the responsibility of courting enemy attack."

Van Rijn rose and lumbered about the cabin, fuming obscenities and volcanic blue clouds. As he passed the shelf where St. Dismas stood, he pinched the candles out in a marked manner. That seemed to trigger something in him. He turned about and said, "Ha! Industrial civilizations, *ja*, maybe so. Not only the pest-begotten Adderkops ply this region of space. Gives some chance perhaps we can come in detection range of an un-beat-up ship, *nie?* You go get Yamamura to jack up our detector sensitivities till we can feel a gnat twiddle its wings back in my Djakarta office on Earth, so lazy the cleaners are. Then we go off this direct course and run a standard naval search pattern at reduced speed."

"And if we find a ship? Could belong to the enemy, you know."

"That chance we take."

"In all events, sir, we'll lose time. The pursuit will gain on us while we follow a search-helix. Especially if we spend days persuading some nonhuman crew who've never heard of the human race, that we have to be taken to Valhalla immediately if not sooner."

"We burn that bridge when we come to it. You have might be a more hopeful scheme?"

"Well..." Torrance pondered a while, blackly.

The steward came in with a fresh tankard. Van Rijn snatched it.

"I think you're right, sir," said Torrance. "I'll go and—"

"Virginal!" bellowed Van Rijn.

Torrance jumped. "What?"

"Virginal! That's the word I was looking for. The first beer of the day, you idiot!"

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The cabin door chimed. Torrance groaned. He'd been hoping for some sleep, at least, after more hours on deck than he cared to number. But when the ship prowled through darkness, seeking another ship which might or might not be out there, and the hunters drew closer..."Come in."

Jeri Kofoed entered. Torrance gaped, sprang to his feet, and bowed. "Freelady! What—what—what a surprise! Is there anything I can do?"

"Please." She laid a hand on his. Her gown was of shimmerite and shameless in cut, because Van Rijn hadn't provided any other sort, but the look she gave Torrance had nothing to do with that. "I had to come, Lodgemaster. If you've any pity at all, you'll listen to me."

He waved her to a chair, offered cigarettes, and struck one for himself. The smoke, drawn deep into his lungs, calmed him a little. He sat down on the opposite side of the table. "If I can be of help to you, Freelady Kofoed, you know I'm happy to oblige. Uh... Freeman Van Rijn..."

"He's asleep. Not that he has any claims on me. I haven't signed a contract or any such thing." Her irritation gave way to a wry smile. "Oh, admitted, we're all his inferiors, in fact as well as in status. I'm not contravening his wishes, not really. It's just that he won't answer my questions, and if I don't find out what's going on I'll have to start screaming."

Torrance weighed a number of factors. A private explanation, in more detail than the crew had required, might indeed be best for her. "As you wish, Freelady," he said, and related what had happened to the converter. "We can't fix it ourselves," he concluded. "If we continued traveling at high quasi-speed, we'd burn it out before we arrived; and then, without power, we'd soon die. If we proceed slowly enough to preserve it, we'd need half a year to reach Valhalla, which is more time than we have supplies for. Though the Adderkops would doubtless track us down within a week or two."

She shivered. "Why? I don't understand." She stared at her glowing cigarette end for a moment, until a degree of composure returned, and with it a touch of humor. "I may pass for a fast, sophisticated girl on Freya, Captain. But you know even better than I, Freya is a jerkwater planet on the very fringe of human civilization. We've hardly any spatial traffic, except the League merchant ships, and they never stay long in port. I really know nothing about military or political technology. No one told me this was anything more important than a scouting mission, because I never thought to inquire. Why should the Adderkops be so anxious to catch us?"

Torrance considered the total picture before framing a reply. As a spaceman of the League, he must make an effort before he could appreciate how little the enemy actually meant to colonists who seldom left their home world. The name "Adderkop" was Freyan, a term of scorn for outlaws who'd been booted off the planet a century ago. Since then, however, the Freyans had had no direct contact with them. Somewhere in the unexplored deeps beyond Valhalla, the fugitives had settled on some unknown planet. Over the generations, their numbers grew, and so did the numbers of their warships. But Freya was still too strong for them to raid, and had no extraplanetary enterprises of her own to be harried. Why should Freya care?

Torrance decided to explain systematically, even if he must repeat the obvious. "Well," he said, "the Adderkops aren't stupid. They keep somewhat in touch with events, and know the Polesotechnic League wants to expand its operations into this region. They don't like that. It'd mean the end of their attacks on planets which can't fight back, their squeezing of tribute and their overpriced trade. Not that the League is composed of saints; we don't tolerate that sort of thing, but merely because freebooting cuts into the profits of our member companies. So the Adderkops undertook, not to fight a full-dress war against us, but to harass our outposts till we gave it up as a bad job. They have the advantage of knowing their own sector of space, which we hardly do at all. And we were, indeed, at the point of writing this whole region off and trying someplace else. Freeman Van Rijn wanted to make one last attempt. The opposition to doing so was so great that he had to come here and lead the expedition himself.

"I suppose you know what he did. Used an unholy skill at bribery and bluff, at extracting what little information the prisoners we'd taken possessed, at fitting odd facts together. He got a clue to a hitherto untried segment. We flitted there, picked up a neutrino trail, and followed it to a human-colonized planet. As you know, it's almost certainly their own home world.

"If we bring back that information, there'll be no more trouble with the Adderkops. Not after the League sends in a few Star class battleships and threatens to bombard their planet. They realize as much. We were spotted; several warcraft jumped us; we were lucky enough to get away. Their ships are obsolete, and so far we've shown them a clean pair of heels. But I hardly think they've quit hunting for us. They'll send their entire fleet cruising in search. Hyperdrive vibrations transmit instantaneously, and can be detected up to about one light-year distance. So if any Adderkop picks up our 'wake' and homes in on it—with us crippled—that's the end."

She drew hard on her cigarette, but remained otherwise calm. "What are your plans?"

"A countermove. Instead of trying to make Freya—uh—I mean, we're proceeding in a search-helix at medium speed, straining our own detectors. If we discover another ship, we'll use the last gasp of our engine to close in. If it's an Adderkop vessel, well, perhaps we can seize it or something; we do have a couple of light guns in our turrets. It may be a nonhuman craft, though. Our intelligence reports, interrogation of prisoners, evaluation of explorers' observations, and so on, all indicate that three or four different species in this region possess the hyperdrive. The Adderkops themselves aren't certain about all of them. Space is so damned *huge*."

"If it does turn out to be nonhuman?"

"Then we'll do what seems indicated."

"I see." Her bright head nodded. She sat for a while, unspeaking, before she dazzled him with a smile. "Thanks, Captain. You don't know how much you've helped me."

Torrance suppressed a foolish grin. "A pleasure, Freelady."

"I'm coming to Earth with you. Did you know that? Freeman Van Rijn has promised me a very good job."

He always does, thought Torrance.

Jeri leaned closer. "I hope we'll have a chance on the Earthward trip to get better acquainted, Captain. Or even right now."

The alarm bell chose that moment to ring.

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The *Hebe G.B.* was a yacht, not a buccaneer frigate. When Nicholas van Rijn was aboard, though, the distinction sometimes got a little blurred. So she had more legs than most ships, detectors of uncommon sensitivity, and a crew experienced in the tactics of overhauling.

She was able to get a bearing on the hyperemission of the other craft long before her own vibrations were observed. Pacing the unseen one, she established the set course it was following, then poured on all available juice to intercept. If the stranger had maintained quasi-velocity, there would have been contact in three or four hours. Instead, its wake indicated a sheering off, an attempt to flee. The *Hebe G.B.* changed course, too, and continued gaining on her slower quarry.

"They're afraid of us," decided Torrance. "And they're not running back toward the Adderkop sun. Which two facts indicate they're not Adderkops themselves, but do have reason to be scared of strangers." He nodded, rather grimly, for during the preliminary investigations he had inspected a few backward planets which the bandit nation had visited.

Seeing that the pursuer kept shortening her distance, the pursued turned off their hyperdrive. Reverting to intrinsic sublight velocity, converter throttled down to minimal output, their ship became an infinitesimal speck in an effectively infinite space. The maneuver often works; after casting about futilely for a while, the enemy gives up and goes home. The *Hebe G.B.*, though, was prepared. The known superlight vector, together with the instant of cutoff, gave her computers a rough idea of where the prey was. She continued to that volume of space and then hopped about in a well-designed search pattern, reverting to normal state at intervals to sample the neutrino haze which any nuclear engine emits. Those nuclear engines known as stars provided most; but by statistical analysis, the computers presently isolated one feeble nearby source. The yacht went thither... and wan against the glittering sky, the other ship appeared in her screens.

It was several times her size, a cylinder with bluntly rounded nose and massive drive cones, numerous housings for auxiliary boats, a single gun turret. The principles of physics dictate that the general conformation of all ships intended for a given purpose shall be roughly the same. But any spaceman could see that this one had never been built by members of Technic civilization.

Fire blazed. Even with the automatic stopping-down of his viewscreen, Torrance was momentarily blinded. Instruments told him that the stranger had fired a fusion shell which his own robo-gunners had intercepted with a missile. The attack had been miserably slow and feeble. This was not a warcraft in any sense; it was no more a match for the *Hebe G.B.* than the yacht was for one of the Adderkops chasing her.

"Hokay, now we got that foolishness out of the way and we can talk business," said Van Rijn. "Get them on the telecom and develop a common language. Fast! Then explain we mean no harm but want just a lift to Valhalla." He hesitated before adding, with a distinct wince, "We can pay well."

"Might prove difficult, sir," said Torrance. "Our ship is identifiably human-built, but chances are that the only humans they've ever met are Adderkops."

"Well, so if it makes needful, we can board them and force them to transport us, *nie?* Hurry up, for Satan's sake! If we wait too long here, like bebobbed snoozers, we'll get caught."

Torrance was about to point out they were safe enough. The Adderkops were far behind the swifter Terrestrial ship. They could have no idea that her hyperdrive was now cut off; when they began to suspect it, they could have no measurable probability of finding her. Then he remembered that the case was not so simple. If the parleying with these strangers took unduly long—more than a week, at best—Adderkop squadrons would have penetrated this general region and gone beyond. They would probably remain on picket for months: which the humans could not do for lack of food. When a hyperdrive did start up, they'd detect it and run down this awkward merchantman with ease. The only hope was to hitch a ride to Valhalla soon, using the head start already gained to offset the disadvantage of reduced speed.

"We're trying all bands, sir," he said. "No response so far." He frowned worriedly. "I don't understand. They must know we've got them cold, and they must have picked up our calls and realize we want to talk. Why don't they respond? Wouldn't cost them anything."

"Maybe they abandoned ship," suggested the communications officer. "They might have hyperdriven lifeboats."

"No." Torrance shook his head. "We'd have spotted that... Keep trying, Freeman Betancourt. If we haven't gotten an answer in an hour, we'll lay alongside and board."

The receiver screens remained blank. But at the end of the grace period, when Torrance was issuing space armor, Yamamura reported something new. Neutrino output had increased from a source near the stern of the alien. Some process involving moderate amounts of energy was being carried out.

Torrance clamped down his helmet. "We'll have a look at that."

He posted a skeleton crew—Van Rijn himself, loudly protesting, took over the bridge—and led his boarding party to the main air lock. Smooth as a gliding shark (the old swine was a blue-ribbon spaceman after all, the captain realized in some astonishment), the *Hebe G.B.* clamped on a tractor beam and hauled herself toward the bigger vessel.

It disappeared. Recoil sent the yacht staggering.

"Beelzebub and botulism!" snarled Van Rijn. "He went back into hyper, ha? We see about that!" The ulcerated converter shrieked as he called upon it, but the engines were given power. On a lung and a half, the Terrestrial ship again overtook the foreigner. Van Rijn phased in so casually that Torrance almost forgot this was a job considered difficult by master pilots. He evaded a frantic pressor beam and tied his yacht to the larger hull with unshearable bands of force. He cut off his hyperdrive again, for the converter couldn't take much more. Being within the force-field of the alien, the *Hebe G.B.* was carried along, though the "drag" of extra mass reduced quasi-speed considerably. If he had hoped the grappled vessel would quit and revert to normal state, he was disappointed. The linked hulls continued plunging faster than light, toward an unnamed constellation.

Torrance bit back an oath, summoned his men, and went outside.

He had never forced entry on a hostile craft before, but assumed it wasn't much different from burning his way into a derelict. Having chosen his spot, he set up a balloon tent to conserve air; no use killing the alien crew. The torches of his men spewed flame; blue actinic sparks fountained backward and danced through zero gravity. Meanwhile the rest of the squad stood by with blasters and grenades.

Beyond, the curves of the two hulls dropped off to infinity. Without compensating electronic viewscreens, the sky was weirdly distorted by aberration and Doppler effect, as if the men were already dead and beating through the other existence toward Judgment. Torrance held his mind firmly to practical worries. Once inboard, the nonhumans made prisoner, how was he to communicate? Especially if he first had to gun down several of them...

The outer shell was peeled back. He studied the inner structure of the plate with fascination. He'd never seen anything like it before. Surely this race had developed space travel quite independently of mankind. Though their engineering must obey the same natural laws, it was radically different in detail. What was that tough but corky substance lining the inner shell? And was the circuitry embedded in it, for he didn't see any elsewhere?

The last defense gave way. Torrance swallowed hard and shot a flashbeam into the interior. Darkness and vacuum met him. When he entered the hull, he floated, weightless; artificial gravity had been turned off. The crew was hiding someplace and...

And...

Torrance returned to the yacht in an hour. When he came on the bridge, he found Van Rijn seated by Jeri. The girl started to speak, took a closer look at the captain's face, and clamped her teeth together.

"Well?" snapped the merchant peevishly.

Torrance cleared his throat. His voice sounded unfamiliar and faraway to him. "I think you'd better come have a look, sir."

"You found the crew, wherever the sputtering hell they holed up? What are they like? What kind of ship is this we've gotten us, ha?"

Torrance chose to answer the last question first. "It seems to be an interstellar animal collector's transport vessel. The main hold is full of cages—environmentally controlled compartments, I should say—with the damndest assortment of creatures I've ever seen outside Luna City Zoo."

"So what the pox is that to me? Where is the collector himself, and his fig-plucking friends?"

"Well, sir." Torrance gulped. "We're pretty sure by now, they're hiding from us. Among all the other animals."

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A tube was run between the yacht's main lock and the entry cut into the other ship. Through this, air was pumped and electric lines were strung, to illuminate the prize. By some fancy juggling with the gravitic generator of the *Hebe G.B.*, Yamamura supplied about one-fourth Earth-weight to the foreigner, though he couldn't get the direction uniform and its decks felt canted in wildly varying degrees.

Even under such conditions, Van Rijn walked ponderously. He stood with a salami in one hand and a raw onion in the other, glaring around the captured bridge. It could only be that, though it was in the bows rather than the waist. The viewscreens were still in operation: smaller than human eyes found comfortable, but revealing the same pattern of stars, surely by the same kind of optical compensators. A control console made a semicircle at the forward bulkhead, too big for a solitary human to operate. Yet presumably the designer had only had one pilot in mind, for a single seat had been placed in the middle of the arc.

Had been. A short metal post rose from the deck. Similar structures stood at other points, and boltholes showed where chairs were once fastened to them. But the seats had been removed.

"Pilot sat there at the center, I'd guess, when they weren't simply running on automatic," Torrance hazarded. "Navigator and communications officer... here and here? I'm not sure. Anyhow, they probably didn't use a copilot, but that chair bollard at the after end of the room suggests that an extra officer sat in reserve, ready to take over."

Van Rijn munched his onion and tugged his goatee. "Pestish big, this panel," he said. "Must be a race of bloody-be-damned octopussies, ha? Look how complicated."

He waved the salami around the half circle. The console, which seemed to be of some fluorocarbon polymer, held very few switches or buttons, but scores of flat luminous plates, each about twenty centimeters square. Some of them were depressed. Evidently these were the controls. Cautious experiment had shown that a stiff push was needed to budge them. The experiment had ended then and there, for the ship's cargo lock had opened and a good

deal of air was lost before Torrance slapped the plate he had been testing hard enough to make the hull reseal itself. One should not tinker with the atomic-powered unknown; most especially not in galactic space.

"They must be strong like horses, to steer by this system without getting exhausted," went on Van Rijn. "The size of everything tells likewise, *nie?*"

"Well, not exactly, sir," said Torrance. "The viewscreens seem made for dwarfs. The meters even more so." He pointed to a bank of instruments, no larger than buttons, on each of which a single number glowed. (Or letter, or ideogram, or what? They looked vaguely Old Chinese.) Occasionally a symbol changed value. "A human couldn't use these long without severe eyestrain. Of course, having eyes better adapted to close work than ours doesn't prove they are not giants. Certainly that switch couldn't be reached from here without long arms, and it seems meant for big hands." By standing on tiptoe, he touched it himself: an outsize double-pole affair set overhead, just above the pilot's hypothetical seat.

The switch fell open.

A roar came from aft. Torrance lurched backward under a sudden force. He caught at a shelf on the after bulkhead to steady himself. Its thin metal buckled as he clutched.

"Devilfish and dunderheads!" cried Van Rijn. Bracing his columnar legs, he reached up and shoved the switch back into position. The noise ended. Normality returned. Torrance hastened to the bridge doorway, a tall arch, and shouted down the corridor beyond: "It's okay! Don't worry! We've got it under control!"

"What the blue blinking blazes happened?" demanded Van Rijn, in somewhat more high-powered words.

Torrance mastered a slight case of the shakes. "Emergency switch, I'd say." His tone wavered. "Turns on the gravitic field full speed ahead, not wasting any force on acceleration compensators. Of course, we being in hyperdrive, it wasn't very effective. Only gave us a—uh—less than one G push, intrinsic. In normal state we'd have accelerated several Gs, at least. It's for quick getaways and... and..."

"And you, with brains like fermented gravy and bananas for fingers, went ahead and yanked it open!"

Torrance felt himself redden. "How was I to know, sir? I must've applied less than half a kilo of force. Emergency switches aren't hair-triggered, after all! Considering how much it takes to move one of those control plates, who'd have thought the switch would respond to so little?"

Van Rijn took a closer look. "I see now there is a hook to secure it by," he said. "Must be they use that when the ship's on a high-gravity planet." He peered down a hole near the center of the panel, about one centimeter in diameter and fifteen deep. At the bottom a small key projected. "This must be another special control, ha? Safer than that switch. You would need thin-nosed pliers to make a turning of it." He scratched his pomaded curls. "But then why is not the pliers hanging handy? I don't see even a hook or bracket or drawer for them."

"I don't care," said Torrance. "When the whole interior's been stripped... There's nothing but a slagheap in the engine room, I tell you, fused metal, carbonized plastic... bedding, furniture, anything they thought might give us a clue to their identity, all melted down in a jury-rigged cauldron. They used their own converter to supply heat. That was the cause of the neutrino flux Yamamura observed. They must have worked like demons."

"But they did not destroy all needful tools and machines, surely? Simpler then they should blow up their whole ship, and us with it. I was sweating like a hog, me, for fear they would do that. Not so good a way for a poor sinful old man to end his days, blown into radioactive stinks three hundred light-years from the vineyards of Earth."

"N-n-no. As far as we can tell from a cursory examination, they didn't sabotage anything absolutely vital. We can't be sure, of course. Yamamura's gang would need weeks just to get a general idea of how this ship is put together, let alone the practical details of operating it. But I agree, the crew isn't bent on suicide. They've got us more neatly trapped than they know, even. Bound helplessly through space—toward their home star, maybe—in any event, almost at right angles to the course we want."

Torrance led the way out. "Suppose we go have a more thorough look at the zoo, sir," he went on. "Yamamura talked about setting up some equipment... to help us tell the crew from the animals!"

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The main hold comprised almost half the volume of the great ship. A corridor below, a catwalk above, ran through a double row of two-decker cubicles. These numbered ninety-six, and were identical. Each was about five meters on a side, with adjustable fluorescent plates in the ceiling and a springy, presumably inert plastic on the floor. Shelves and parallel bars ran along the side walls, for the benefit of animals that liked jumping or climbing. The rear wall was connected to well-shielded machines; Yamamura didn't dare tamper with these, but said they obviously regulated atmosphere, temperature, gravity, sanitation, and other environmental factors within each "cage." The front wall, facing on corridor and catwalk, was transparent. It held a stout air lock, almost as high as the cubicle itself, motorized but controlled by simple wheels inside and out. Only a few compartments were empty.

The humans had not strung fluoros in this hold, for it wasn't necessary. Torrance and Van Rijn walked through shadows, among monsters; the simulated light of a dozen different suns streamed around them: red, orange, yellow, greenish, and harsh electric blue.

A thing like a giant shark, save that tendrils fluttered about its head, swam in a water-filled cubicle among fronded seaweeds. Next to it was a cageful of tiny flying reptiles, their scales aglitter in prismatic hues, weaving and dodging through the air. On the opposite side, four mammals crouched among yellow mists: beautiful creatures, the

size of a bear, vividly tiger-striped, walking mostly on all fours but occasionally standing up; then you noticed the retractable claws between stubby fingers, and the carnivore jaws on the massive heads. Farther on the humans passed half a dozen sleek red beasts like six-legged otters, frolicking in a tank of water provided for them. The environmental machines must have decided this was their feeding time, for a hopper spewed chunks of proteinaceous material into a trough and the animals lolloped over to rip it with their fangs.

"Automatic feeding," Torrance observed. "I think probably the food is synthesized on the spot, according to the specifications of each individual species as determined by biochemical methods. For the crew, also. At least, we haven't found anything like a galley."

Van Rijn shuddered. "Nothing but synthetics? Not even a little glass Genever before dinner?" He brightened. "Ha, maybe here we find a good new market. And until they learn the situation, we can charge them triple prices."

"First," clipped Torrance, "we've got to find them."

Yamamura stood near the middle of the hold, focusing a set of instruments on a certain cage. Jeri stood by, handing him what he asked for, plugging and unplugging at a small power-pack. Van Rijn hove into view. "What goes on, anyhow?" he asked.

The chief engineer turned a patient brown face to him. "I've got the rest of the crew examining the ship in detail, sir," he said. "I'll join them as soon as I've gotten Freelady Kofoed trained at this particular job. She can handle the routine of it while the rest of us use our special skills to..." His words trailed off. He grinned ruefully. "To poke and prod gizmos we can't possibly understand in less than a month of work, with our limited research tools."

"A month we have not got," said Van Rijn. "You are here checking conditions inside each individual cage?"

"Yes, sir. They're metered, of course, but we can't read the meters, so we have to do the job ourselves. I've haywired this stuff together, to give an approximate value of gravity, atmospheric pressure and composition, temperature, illumination spectrum, and so forth. It's slow work, mostly because of all the arithmetic needed to turn the dial readings into such data. Luckily, we don't have to test every cubicle, or even most of them."

"No," said Van Rijn. "Even to a union organizer, obvious this ship was never made by fishes or birds. In fact, some kind of hands is always necessary."

"Or tentacles." Yamamura nodded at the compartment before him. The light within was dim red. Several black creatures could be seen walking restlessly about. They had stumpy-legged quadrupedal bodies, from which torsos rose, centaur-fashion, toward heads armored in some bony material. Below the faceless heads were six thick, ropy arms, set in triplets. Two of these ended in three boneless but probably strong fingers.

"I suspect these are our coy friends," said Yamamura. "If so, we'll have a deuce of a time. They breathe hydrogen under high pressure and triple gravity, at a temperature of seventy below."

"Are they the only ones who like that kind of weather?" asked Torrance.

Yamamura gave him a sharp look. "I see what you're getting at, skipper. No, they aren't. In the course of putting this apparatus together and testing it, I've already found three other cubicles where conditions are similar. And in those, the animals are obviously just animals: snakes and so on, which couldn't possibly have built this ship."

"But then these octopus-horses can't be the crew, can they?" asked Jeri timidly. "I mean, if the crew were collecting animals from other planets, they wouldn't take home animals along, would they?"

"They might," said Van Rijn. "We have a cat and a couple parrots aboard the *Hebe G.B.*, *nie?* Or, there are many planets with very similar conditions of the hydrogen sort, just like Earth and Freya are much-alike oxygen planets. So that proves nothings." He turned toward Yamamura, rather like a rotating globe himself. "But see here, even if the crew did pump out all the air before we boarded, why not check their reserve tanks? If we find air stored away just like these diddlers here are breathing..."

"I thought of that," said Yamamura. "In fact, it was almost the first thing I told the men to look for. They've located nothing. I don't think they'll have any success, either. Because what they did find was an adjustable catalytic manifold. At least, it looks as if it should be, though we'd need days to find out for certain. Anyhow, my guess is that it renews exhausted air and acts as a chemosynthesizer to replace losses from a charge of simple inorganic compounds. The crew probably bled all the ship's air into space before we boarded. When we go away, if we do, they'll open the door of their particular cage a crack, so its air can trickle out. The environmental adjuster will automatically force the chemosynthesizer to replace this. Eventually the ship'll be full of enough of their kind of air for them to venture forth and adjust things more precisely." He shrugged. "That's assuming they even need to. Perhaps Earth-type conditions suit them perfectly well."

"Uh, yes," said Torrance. "Suppose we look around some more, and line up the possibly intelligent species."

Van Rijn trundled along with him. "What sort intelligence they got, these bespattered aliens?" he grumbled. "Why try this stupid masquerade in the first places?"

"It's not too stupid to have worked so far," said Torrance dryly. "We're being carried along on a ship we don't know how to stop. They must hope we'll either give up and depart, or else that we'll remain baffled until the ship enters their home region. At which time, quite probably a naval vessel—or whatever they've got—will detect us, close in, and board us to check up on what's happened."

He paused before a compartment. "I wonder..."

The quadruped within was the size of an elephant, though with a more slender build indicating a lower gravity than Earth's. Its skin was green and faintly scaled, a ruff of hair along the back. The eyes with which it looked out

were alert and enigmatic. It had an elephant-like trunk, terminating in a ring of pseudodactyls which must be as strong and sensitive as human fingers.

"How much could a one-armed race accomplish?" mused Torrance. "About as much as we, I imagine, if not quite as easily. And sheer strength would compensate. That trunk could bend an iron bar."

Van Rijn grunted and went past a cubicle of feathered ungulates. He stopped before the next one. "Now here are some beasts might do," he said. "We had one like them on Earth once. What they called it? Quintilla? No, gorilla. Or chimpanzee, better, of gorilla size."

Torrance felt his heart thud. Two adjoining sections each held four animals of a kind which looked extremely hopeful. They were bipedal, short-legged and long-armed. Standing two meters tall, with a three-meter arm span, one of them could certainly operate that control console alone. The wrists, thick as a man's thighs, ended in proportionate hands, four-digited including a true thumb. The three-toed feet were specialized for walking, like man's feet. Their bodies were covered with brown fleece. Their heads were comparatively small, rising almost to a point, with massive snouts and beady eyes under cavernous brow ridges. As they wandered aimlessly about, Torrance saw that they were divided among males and females. On the sides of each neck he noticed two lumens closed by sphincters. The light upon them was the familiar yellowish-white of a Sol-type star.

He forced himself to say, "I'm not sure. Those huge jaws must demand corresponding maxillary muscles, attaching to a ridge on top of the skull. Which'd restrict the cranial capacity."

"Suppose they got brains in their bellies," said Van Rijn.

"Well, some people do," murmured Torrance. As the merchant choked, he added in haste, "No, actually, sir, that's hardly believable. Neural paths would get too long, and so forth. Every animal I know of, if it has a central nervous system at all, keeps the brain close to the principal sense organs: which are usually located in the head. To be sure, a relatively small brain, within limits, doesn't mean these creatures are not intelligent. Their neurones might well be more efficient than ours."

"Humph and hassenpfeffer!" said Van Rijn. "Might, might, might!" As they continued among strange shapes: "We can't go too much by atmosphere or light, either. If hiding, the crew could vary conditions quite a bit from their norm without hurting themselves. Gravity, too, by twenty or thirty percent."

"I hope they breathe oxygen, though—Hoy!" Torrance stopped. After a moment, he realized what was so eerie about the several forms under the orange glow. They were chitinous-armored, not much bigger than a squarish military helmet and about the same shape. Four stumpy legs projected from beneath to carry them awkwardly about on taloned feet; also a pair of short tentacles ending in a bush of cilia. There was nothing special about them, as extra-Terrestrial animals go, except the two eyes which gazed from beneath each helmet: as large and somehow human as—well—the eyes of an octopus.

"Turtles," snorted Van Rijn. "Armadillos at most."

"There can't be any harm in letting Jer—Miss Kofoed check their environment too," said Torrance.

"It can waste time."

"I wonder what they eat. I don't see any mouths."

"Those tentacles look like capillary suckers. I bet they are parasites, or overgrown leeches, or something else like one of my competitors. Come along."

"What do we do after we've established which species could possibly be the crew?" asked Torrance. "Try to communicate with each in turn?"

"Not much use, that. They hide because they don't want to communicate. Unless we can prove to them we are not Adderkops... But hard to see how."

"Wait! Why'd they conceal themselves at all, if they've had contact with the Adderkops? It wouldn't work."

"I think I tell you that, by damn," said Van Rijn. "To give them a name, let us call this unknown race the Eksers. So. The Eksers been traveling space for some time, but space is so big they never bumped into humans. Then the Adderkop nation arises, in this sector where humans never was before. The Eksers hear about this awful new species which has gotten into space also. They land on primitive planets where Adderkops have made raids, talk to natives, maybe plant automatic cameras where they think raids will soon come, maybe spy on Adderkop camps from afar or capture a lone Adderkop ship. So they know what humans look like, but not much else. They do not want humans to know about them, so they shun contact; they are not looking for trouble. Not before they are all prepared to fight a war, at least. Hell's sputtering griddles! Torrance, we have *got* to establish our bona fides with this crew, so they take us to Freya and afterward go tell their leaders all humans are not so bad as the slime-begotten Adderkops. Otherwise, maybe we wake up one day with some planets attacked by Eksers, and before the fighting ends, we have spent billions of credits!" He shook his fists in the air and bellowed like a wounded bull. "It is our duty to prevent this!"

"Our first duty is to get home alive, I'd say," Torrance answered curtly. "I have a wife and kids."

"Then stop throwing sheepish eyes at Jeri Kofoed. I saw her first."

The search turned up one more possibility. Four organisms the length of a man and the build of thick-legged caterpillars dwelt under greenish light. Their bodies were dark blue, spotted with silver. A torso akin to that of the tentacled centauroids, but stockier, carried two true arms. The hands lacked thumbs, but six fingers arranged around a three-quarter circle could accomplish much the same things. Not that adequate hands prove effective intelligence; on Earth, not only simians but a number of reptiles and amphibia boast as much, even if man has the best, and man's apish ancestors were as well-equipped in this respect as we are today. However, the round flat-faced heads of

these beings, the large bright eyes beneath feathery antennae of obscure function, the small jaws and delicate lips, all looked promising.

Promising of what? thought Torrance.

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Three Earth-days later, he hurried down a central corridor toward the Eksers engine room.

The passage was a great hemicylinder lined with the same rubbery gray plastic as the cages, so that footfalls were silent and spoken words weirdly unresonant. But a deeper vibration went through it, the almost subliminal drone of the hyper-engine, driving the ship into darkness toward an unknown star, and announcing their presence to any hunter straying within a light-year of them. The fluoros strung by the humans were far apart, so that one passed through bands of humming shadow. Doorless rooms opened off the hallway. Some were still full of supplies, and however peculiar the shape of tools and containers might be, however unguessable their purpose, this was a reassurance that one still lived, was not yet a ghost aboard the Flying Dutchman. Other cabins, however, had been inhabited. And their bareness made Torrance's skin crawl.

Nowhere did a personal trace remain. Books, both folio and micro, survived, but in the finely printed symbology of a foreign planet. Empty places on the shelves suggested that all illustrated volumes had been sacrificed. Certainly one could see where pictures stuck on the walls had been ripped down. In the big private cabins, in the still larger one which might have been a saloon, as well as in the engine room and workshop and bridge, only the bollards to which furniture had been bolted were left. Long low niches and small cubbyholes were built into the cabin bulkheads, but when all bedding had been thrown into a white-hot cauldron, how could one guess which were the bunks... if either kind were? Clothing, ornaments, cooking and eating utensils, everything was destroyed. One room must have been a lavatory, but all the facilities had been ripped out. Another might have been used for scientific studies, presumably of captured animals, but was so gutted that no human was certain.

By God, you've got to admire them, Torrance thought. Captured by beings whom they had every reason to think of as conscienceless monsters, the aliens had not taken the easy way out, the atomic explosion that would annihilate both crews. They might have, except for the chance of this being a zoo ship. But given a hope of survival, they snatched it, with an imaginative daring few humans could have matched. Now they sat in plain view, waiting for the monsters to depart—without wrecking their ship in mere spitefulness—or for a naval vessel of their own to rescue them. They had no means of knowing their captors were not Adderkops, or that this sector would soon be filled with Adderkop squadrons; the bandits rarely ventured even this close to Valhalla. Within the limits of available information, the aliens were acting with complete logic. But the nerve it took!

I wish we could identify them and make friends, thought Torrance. The Eksers would be damned good friends for Earth to have. Or Ramanujan, or Freya, or the entire Polesotechnic League... With a lopsided grin: I'll bet they'd be nowhere near as easy to swindle as Old Nick thinks. They might well swindle him. That I'd love to see!

My reason is more personal, though, he thought with a return of bleakness. If we don't clear up this misunderstanding soon, neither they nor we will be around. I mean *soon*. If we have another three or four days of grace, we're lucky.

The passage opened on a well, with ramps curving down either side to a pair of automatic doors. One door led to the engine room, Torrance knew. Behind it, a nuclear converter powered the ship's electrical system, gravitic cones, and hyperdrive; the principles on which this was done were familiar to him, but the actual machines were enigmas cased in metal and in foreign symbols. He took the other door, which opened on a workshop. A good deal of the equipment here was identifiable, however distorted to his eyes: lathe, drill press, oscilloscope, crystal tester. Much else was mystery. Yamamura sat at an improvised workbench, fitting together a piece of electronic apparatus. Several other devices, haywired on breadboards, stood close by. His face was shockingly haggard, and his hands trembled. He'd been working this whole time, with stimpills to keep him awake.

As Torrance approached, the engineer was talking with Betancourt, the communications man. The entire crew of the *Hebe G.B.* were under Yamamura's direction, in a frantic attempt to outflank the Eksers by learning on their own how to operate this ship.

"I've identified the basic electrical arrangement, sir," Betancourt was saying. "They don't tap the converter directly, like us; so evidently they haven't developed our stepdown methods. Instead, they use a heat exchanger to run an extremely large generator—yeah, the same thing you guessed was an armature-type dynamo—and draw A.C. for the ship off that. Where D.C. is needed, the A.C. passes through a set of rectifier plates which, by looking at 'em, I'm sure must be copper oxide. They're bare, behind a safety screen, though so much current goes through that they're too hot to look at close up. It all seems kind of primitive to me."

"Or else merely different," sighed Yamamura. "We use a light-element-fusion converter, one of whose advantages is that it can develop electric current directly. They may have perfected a power plant which utilizes moderately heavy elements with small positive packing fractions. I remember that was tried on Earth a long while ago, and given up as impractical. But maybe the Eksers are better engineers than us. Such a system would have the advantage of needing less refinement of fuel—which'd be a real advantage to a ship knocking about among unexplored planets. Maybe enough to justify that clumsy heat exchanger and rectifier system. We simply don't know."

He stared head-shakingly at the wires he was soldering. "We don't know a damn thing," he said. Seeing Torrance: "Well, carry on, Freeman Betancourt. And remember, *festina lente*."

"For fear of wrecking the ship?" asked the captain.

Yamamura nodded. "The Eksers would've known a small craft like ours couldn't generate a big enough hyperforce field to tug their own ship home," he replied. "So they'll have made sure no prize crew could make off with it. Some of the stuff may be booby-trapped to wreck itself if it isn't handled just so; and how'd we ever make repairs? Hence we're proceeding with the utmost caution. So cautiously that we haven't a prayer of figuring out the controls before the Adderkops find us."

"It keeps the crew busy, though."

"Which is useful. Uh-huh. Well, sir, I've about got my basic apparatus set up. Everything seems to test okay. Now let me know which animal you want to investigate first." As Torrance hesitated, the engineer explained: "I have to adapt the equipment for the creature in question, you see. Especially if it's a hydrogen breather."

Torrance shook his head. "Oxygen. In fact, they live under conditions so much like ours that we can walk right into their cages. The gorilloids. That's what Jeri and I have named them. Those woolly, two-meter-tall bipeds with the ape faces."

Yamamura made an ape face of his own. "Brutes that powerful? Have they shown any sign of intelligence?"

"No. But then, would you expect the Eksers to do so? Jeri Kofoed and I have been parading in front of the cages of all the possible species, making signs, drawing pictures, everything we could think of, trying to get the message across that we are not Adderkops and the genuine article is chasing us. No luck, of course. All the animals did give us an interested regard except the gorilloids... which may or may not prove anything."

"What animals, now? I've been so blinking busy—"

"Well, we call 'em the tiger apes, the tentacle centaurs, the elephantoid, the helmet beasts, and the caterpiggles. That's stretching things, I know; the tiger apes and the helmet beasts are highly improbable, to say the least, and the elephantoid isn't much more convincing. The gorilloids have the right size and the most efficient-looking hands, and they're oxygen breathers as I said, so we may as well take them first. Next in order of likelihood, I'd guess, are the caterpiggles and the tentacle centaurs. But the caterpiggles, though oxygen breathers, are from a high-gravity planet; their air pressure would give us narcosis in no time. The tentacle centaurs breathe hydrogen. In either case, we'd have to work in space armor."

"The gorilloids will be quite bad enough, thank you kindly!"

Torrance looked at the workbench. "What exactly do you plan to do?" he asked. "I've been too busy with my own end of this affair to learn any details of yours."

"I've adapted some things from the medical kit," said Yamamura. "A sort of ophthalmoscope, for example; because the ship's instruments use color codes and finely printed symbols, so that the Eksers are bound to have eyes at least as good as ours. Then this here's a nervous-impulse tracer. It detects synaptic flows and casts a three-dimensional image into yonder crystal box, so we can see the whole nervous system functioning as a set of luminous traces. By correlating this with gross anatomy, we can roughly identify the sympathetic and parasympathetic systems—or their equivalents—I hope. And the brain. And, what's really to the point, the degree of brain activity more or less independent of the other nerve paths. That is, whether the animal is thinking."

He shrugged. "It tests out fine on me. Whether it'll work on a nonhuman, especially in a different sort of atmosphere, I do not know. I'm sure it'll develop bugs."

"We can but try," quoted Torrance wearily.

"I suppose Old Nick is sitting and thinking," said Yamamura in an edged voice. "I haven't seen him for quite some time."

"He's not been helping Jeri and me either," said Torrance. "Told us our attempt to communicate was futile until we could prove to the Eksers that we knew who they were. And even after that, he said, the only communication at first will be by gestures made with a pistol."

"He's probably right."

"He's not right! Logically, perhaps, but not psychologically. Or morally. He sits in his suite with a case of brandy and a box of cigars. The cook, who could be down here helping you, is kept aboard the yacht to fix him his damned gourmet meals. You'd think he didn't care if we're blown out of the sky!"

He remembered his oath of fealty, his official position, and so on and so on. They seemed nonsensical enough, here on the edge of extinction. But habit was strong. He swallowed and said harshly, "Sorry. Please ignore what I said. When you're ready, Freeman Yamamura, we'll test the gorilloids."

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Six men and Jeri stood by in the passage with drawn blasters. Torrance hoped fervently they wouldn't have to shoot. He hoped even more that, if they did have to, he'd still be alive.

He gestured to the four crewmen at his back. "Okay, boys." He wet his lips. His heart thudded. Being a captain and a Lodgemaster was very fine until moments like this came, when you must make a return for all your special privileges.

He spun the outside control wheel. The air-lock motor hummed and opened the doors. He stepped through, into a cage of gorilloids.

Pressure differentials weren't enough to worry about, but after all this time at one-fourth G, to enter a field only ten percent less than Earth's was like a blow. He lurched, almost fell, gasped in an air warm and thick and full of unnamed stench. Sagging back against the wall, he stared across the floor at the four bipeds. Their brown fleecy bodies loomed unfairly tall, up and up to the coarse faces. Eyes overshadowed by brows glared at him. He clapped a hand on his stun pistol. He didn't want to shoot it, either. No telling what supersonics might do to a nonhuman nervous system; and if these were in truth the crewfolk, the worst thing he could do was inflict serious injury on one of them. But he wasn't used to being small and frail. The knurled handgrip was a comfort.

A male growled, deep in his chest, and advanced a step. His pointed head thrust forward, the sphincters in his neck opened and shut like sucking mouths; his jaws gaped to show the white teeth.

Torrance backed toward a corner. "I'll try to attract that one in the lead away from the others," he called softly. "Then get him."

"Aye." A spacehand, a stocky slant-eyed nomad from Altai, uncoiled a lariat. Behind him, the other three spread a net woven for this purpose.

The gorilloid paused. A female hooted. The male seemed to draw resolution from her. He waved the others back with a strangely human-like gesture and stalked toward Torrance.

The captain drew his stunner, pointed it shakily, resheathed it, and held out both hands. "Friend," he croaked.

His hope that the masquerade might be dropped became suddenly ridiculous. He sprang back toward the air lock. The gorilloid snarled and snatched at him. Torrance wasn't fast enough. The hand ripped his shirt open and left a bloody trail on his breast. He went to hands and knees, stabbed with pain. The Altaian's lasso whirled and snaked forth. Caught around the ankles, the gorilloid crashed. His weight shook the cubicle.

"Get him! Watch out for his arms! Here—"

Torrance staggered back to his feet. Beyond the melee, where four men strove to wind a roaring, struggling monster in a net, he saw the other three creatures. They were crowded into the opposite corner, howling in basso. The compartment was like the inside of a drum.

"Get him out," choked Torrance. "Before the others charge."

He aimed his stunner again. If intelligent, they'd know this was a weapon. They might attack anyway... Deftly, the man from Altai roped an arm, snubbed his lariat around the gargantuan torso, and made it fast by a slip knot. The net came into position. Helpless in cords of wire-strong fiber, the gorilloid was dragged to the entrance. Another male advanced, step by jerky step. Torrance stood his ground. The animal ululation and human shouting surfed about him, within him. His wound throbbed. He saw with unnatural clarity: the muzzle full of teeth that could snap his head off, the little dull eyes turned red with fury, the hands so much like his own but black-skinned, four-fingered, and enormous...

"All clear, skipper!"

The gorilloid lunged. Torrance scrambled through the airlock chamber. The giant followed. Torrance braced himself in the corridor and aimed his stun pistol. The gorilloid halted, shivered, looked around in something resembling bewilderment, and retreated. Torrance closed the air lock.

Then he sat down and trembled.

Jeri bent over him. "Are you all right?" she breathed. "Oh! You've been hurt!"

"Nothing much," he mumbled. "Gimme a cigarette."

She took one from her belt pouch and said with a crispness he admired, "I suppose it is just a bruise and a deep scratch. But we'd better check it, anyway, and sterilize. Might be infected."

He nodded but remained where he was until he had finished the cigarette. Further down the corridor, Yamamura's men got their captive secured to a steel framework. Unharmful but helpless, the brute yelped and tried to bite as the engineer approached with his equipment. Returning him to the cubicle afterward was likely to be almost as tough as getting him out.

Torrance rose. Through the transparent wall, he saw a female gorilloid viciously pulling something to shreds, and realized he had lost his turban when he was knocked over. He sighed. "Nothing much we can do till Yamamura gives us a verdict," he said. "Come on, let's go rest a while."

"Sick bay first," said Jeri firmly. She took his arm. They went to the entry hole, through the tube, and into the steady half-weight of the *Hebe G.B.* which Van Rijn preferred. Little was said while Jeri got Torrance's shirt off, swabbed the wound with universal disinfectant, which stung like hell, and bandaged it. Afterward he suggested a drink.

They entered the saloon. To their surprise, and to Torrance's displeasure, Van Rijn was there. He sat at the inlaid mahogany table, dressed in snuff-stained lace and his usual sarong, a bottle in one hand and a Trichinopoly cigar in the other. A litter of papers lay before him.

"Ah, so," he said, glancing up. "What gives?"

"They're testing a gorilloid now." Torrance flung himself into a chair. Since the steward had been drafted for the capture party, Jeri went after drinks. Her voiced floated back, defiant:

"Captain Torrance was almost killed in the process. Couldn't you at least come watch, Nick?"

"What use I should watch, like some tourist with haddock eyes?" scoffed the merchant. "I make no skeletons about it, I am too old and fat to help chase large economy-size apes. Nor am I so technical I can twiddle knobs for Yamamura." He took a puff of his cigar and added complacently, "Besides, that is not my job. I am no kind of specialist, I have no fine university degrees, I learned in the school of hard knockers. But what I learned is how to make men do things for me, and then how to make something profitable from all their doings."

Torrance breathed out, long and slow. With the tension eased, he was beginning to feel immensely tired. "What're you checking over?" he asked.

"Reports of engineer studies on the Ekser ship," said Van Rijn. "I told everybody should take full notes on what they observed. Somewhere in those notes is maybe a clue we can use. If the gorilloids are not the Eksers, I mean. The gorilloids are possible, and I see no way to eliminate them except by Yamamura's checkers."

Torrance rubbed his eyes. "They're not entirely plausible," he said. "Most of the stuff we've found seems meant for big hands. But some of the tools, especially, are so small that... Oh, well, I suppose a nonhuman might be as puzzled by an assortment of our own tools. Does it really make sense that the same race would use sledge hammers and etching needles?"

Jeri came back with two stiff Scotch-and-sodas. His gaze followed her. In a tight blouse and half knee-length skirt, she was worth following. She sat down next to him rather than to Van Rijn, whose jet eyes narrowed.

However, the older man spoke mildly. "I would like if you should list for me, here and now, the other possibilities, with your reasons for thinking of them. I have seen them too, natural, but my own ideas are not all clear yet and maybe something that occurs to you would joggle my head."

Torrance nodded. One might as well talk shop, even though he'd been over this ground a dozen times before with Jeri and Yamamura.

"Well," he said, "the tentacle centaurs appear very likely. You know the ones I mean. They live under red light and about half again Earth's gravity. A dim sun and a low temperature must make it possible for their planet to retain hydrogen, because that's what they breathe, hydrogen and argon. You know how they look: bodies sort of like rhinoceri, torsos with bone-plated heads and fingered tentacles. Like the gorilloids, they're big enough to pilot this ship easily.

"All the others are oxygen breathers. The ones we call caterpiggles—the long, many-legged, blue-and-silver ones, with the peculiar hands and the particularly intelligent-looking faces—they're from an oddball world. It must be big. They're under three Gs in their cage, which can't be a red herring for this length of time. Body fluid adjustment would go out of kilter, if they're used to much lower weight. Even so, their planet has oxygen and nitrogen rather than hydrogen, under a dozen Earth-atmospheres' pressure. The temperature is rather high, fifty degrees. I imagine their world, though of nearly Jovian mass, is so close to its sun that the hydrogen was boiled off, leaving a clear field for evolution similar to Earth's.

"The elephantoid comes from a planet with only about half our gravity. He's the single big fellow with a trunk ending in fingers. He gets by in air too thin for us, which indicates the gravity in his cubicle isn't faked either."

Torrance took a long drink. "The rest all live under pretty terrestroid conditions," he resumed. "For that reason, I wish they were more probable. But actually, except the gorilloids, they seem like long shots. The helmet beasts—"

"What's that?" asked Van Rijn.

"Oh, you remember," said Jeri. "Those eight or nine things like humpbacked turtles, not much bigger than your head. They crawl around on clawed feet, waving little tentacles that end in filaments. They blot up food through those: soupy stuff the machines dump into their trough. They haven't anything like effective hands—the tentacles could only do a few very simple things—but we gave them some time because they do seem to have better developed eyes than parasites usually do."

"Parasites don't evolve intelligence," said Van Rijn. "They got better ways to make a living, by damn. Better make sure the helmet beasts really are parasites—in their home environments—and got no hands tucked under those shells—before you quite write them off. Who else you got?"

"The tiger apes," said Torrance. "Those striped carnivores built something like bears. They spend most of their time on all fours, but they do stand up and walk on their hind legs sometimes, and they do have hands. Clumsy, thumbless ones, with retractable claws, but on all their limbs. Are four hands without thumbs as good as two with? I don't know. I'm too tired to think."

"And that's all, ha?" Van Rijn tilted the bottle to his lips. After a prolonged gurgling he set it down, belched, and blew smoke through his majestic nose. "Who's to try next, if the gorilloids flunk?"

"It better be the caterpiggles, in spite of the air pressure," said Jeri. "Then... oh... the tentacle centaurs, I suppose. Then maybe the—"

"Horse maneuvers!" Van Rijn's fist struck the table. The bottle and glasses jumped. "How long it takes to catch and check each one? Hours, *nie?* And in between times, takes many more hours to adjust the apparatus and chase out all the hiccups it develops under a new set of conditions. Also, Yamamura will collapse if he can't sleep soon, and who else we got can do this? All the whiles, the forstunken Adderkops get closer. We have not got time for that method! If the gorilloids don't pan out, then only logic will help us. We must deduce from the facts we have, who the Eksers are."

"Go ahead." Torrance drained his glass. "I'm going to take a nap."

Van Rijn purpled. "That's right!" he huffed. "Be like everybody else. Loaf and play, dance and sing, enjoy yourselves the liver-long day. Because you always got poor old Nicholas van Rijn there, to heap the work and worry on his back. Oh, dear St. Dismas, why can't you at least make some *one* other person in this whole universe do something useful?"

...Torrance was awakened by Yamamura. The gorilloids were not the Eksers. They were color blind and incapable of focusing on the ship's instruments; their brains were small, with nearly the whole mass devoted to purely animal functions. He estimated their intelligence as equal to a dog's.

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The captain stood on the bridge of the yacht, because it was a familiar place, and tried to accustom himself to being doomed.

Space had never seemed so beautiful as now. He was not well acquainted with the local constellations, but his trained gaze identified Perseus, Auriga, Taurus, not much distorted since they lay in the direction of Earth. (And of Ramanujan, where gilt towers rose out of mists to catch the first sunlight, blinding against blue Mount Gandhi.) A few individuals could also be picked out, ruby Betelgeuse, amber Spica, the pilot stars by which he had steered through his whole working life. Otherwise, the sky was aswarm with small frosty fires, across blackness unclouded and endless. The Milky Way girdled it with cool silver, a nebula glowed faint and green, another galaxy spiraled on the mysterious edge of visibility. He thought less about the planets he had trod, even his own, than about this faring between them which was soon to terminate. For end it would, in a burst of violence too swift to be felt. Better go out thus cleanly when the Adderkops came, than into their dungeons.

He stubbed out his cigarette. Returning, his hand caressed the dear shapes of controls. He knew each switch and knob as well as he knew his own fingers. This ship was his; in a way, himself. Not like that other, whose senseless control board needed a giant and a dwarf, whose emergency switch fell under a mere slap if it wasn't hooked in place, whose—

A light footfall brought him twisting around. Irrationally, so strained was he, his heart flew up within him. When he saw it was Jeri, he eased his muscles, but the pulse continued quick in his blood.

She advanced slowly. The overhead light gleamed on her yellow hair and in the blue of her eyes. But she avoided his glance, and her mouth was not quite steady.

"What brings you here?" he asked. His tone fell even more soft than he had intended.

"Oh... the same as you." She stared out the viewscreen. During the time since they captured the alien ship, or it captured them, a red star off the port bow had visibly grown. Now it burned baleful as they passed, a light-year distant. She grimaced and turned her back to it. "Yamamura is readjusting the test apparatus," she said thinly. "No one else knows enough about it to help him, but he has the shakes so bad from exhaustion he can scarcely do the job himself. Old Nick just sits in his suite, smoking and drinking. He's gone through that one bottle already, and started another. I couldn't breathe in there any longer, it was so smoky. And he won't say a word. Except to himself, in Malay or something. I couldn't stand it."

"We may as well wait," said Torrance. "We've done everything we can, till it's time to check a caterpiggle. We'll have to do that spacesuited, in their own cage, and hope they don't all attack us."

She slumped. "Why bother?" she said. "I know the situation as well as you. Even if the caterpigglers are the Eksers, under those conditions we'll need a couple of days to prove it. I doubt if we have that much time left. If we start toward Valhalla two days from now, I'll bet we're detected and run down before we get there. Certainly, if the caterpigglers are only animals too, we'll never get time to test a third species. Why bother?"

"We've nothing else to do," said Torrance.

"Yes, we do. Not this ugly, futile squirming about, like cornered rats. Why can't we accept that we're going to die, and use the time to... to be human again?"

Startled, he looked back from the sky to her. "What do you mean?"

Her lashes fluttered downward. "I suppose that would depend on what we each prefer. Maybe you'd want to, well, get your thoughts in order or something."

"How about you?" he asked through his heartbeat.

"I'm not a thinker." She smiled forlornly. "I'm afraid I'm just a shallow sort of person. I'd like to enjoy life while I have it." She half turned from him. "But I can't find anyone I'd like to enjoy it with."

He, or his hands, grabbed her bare shoulders and spun her around to face him. She felt silken under his palms. "Are you sure you can't?" he said roughly. She closed her eyes and stood with face tilted upward, lips half parted. He kissed her. After a second she responded.

After a minute, Nicholas van Rijn appeared in the doorway.

He stood an instant, pipe in hand, gun belted to his waist, before he flung the churchwarden shattering to the deck. "So!" he bellowed.

"Oh!" wailed Jeri.

She disengaged herself. A tide of rage mounted in Torrance. He knotted his fists and started toward Van Rijn.

"So!" repeated the merchant. The bulkheads seemed to quiver with his voice. "By louse-bitten damn, this is a fine thing for me to come on. Satan's tail in a mousetrap! I sit hour by hour sweating my brain to the bone for the sake of

your worthless life, and all whiles you, you illegitimate spawn of a snake with dandruff and a cheese mite, here you are making up to my own secretary hired with my own hard-earned money! Gargoyles and *Götterdämmerung!* Down on your knees and beg my pardon, or I mash you up and sell you for dogfood!"

Torrance stopped, a few centimeters from Van Rijn. He was slightly taller than the merchant, if less bulky, and at least thirty years younger. "Get out," he said in a strangled voice.

Van Rijn turned puce and gobbled at him.

"Get out," repeated Torrance. "I'm still the captain of this ship. I'll do what I damned well please, without interference from any loud-mouthed parasite. Get off the bridge, or I'll toss you out on your fat bottom!"

The color faded in Van Rijn's cheeks. He stood motionless for whole seconds. "Well, by damn," he whispered at last. "By damn and death, cubical. He has got the nerve to talk back."

His left fist came about in a roundhouse swing. Torrance blocked it, though the force nearly threw him off his feet. His own left smacked the merchant's stomach, sank a short way into fat, encountered the muscles, and rebounded bruised. Then Van Rijn's right fist clopped. The cosmos exploded around Torrance. He flew up in the air, went over backward, and lay where he fell.

When awareness returned, Van Rijn was cradling his head and offering brandy which a tearful Jeri had fetched. "Here, boy. Go slow there. A little nip of this, ha? That goes good. There, now, you only lost one tooth and we get that fixed at Freya. You can even put it on expense account. There, that makes you feel more happy, *nie?* Now, girl, Jarry, Jelly, whatever your name is, give me that stimpill. Down the hatchworks, boy. And then, upsy-rosy, onto your feet. You should not miss the fun."

One-handed, Van Rijn heaved Torrance erect. The captain leaned a while on the merchant, until the stimpill removed aches and dizziness. Then, huskily through swollen lips, he asked, "What's going on? What d' you mean?"

"Why, I know who the Eksers are. I came to get you, and we fetch them from their cage." Van Rijn nudged Torrance with a great splay thumb and whispered almost as softly as a hurricane. "Don't tell anyone or I have too many fights, but I like a brass-bound nerve like you got. When we get home, I think you transfer off this yacht to command of a trading squadron. How you like that, ha? But come, we still got a damn plenty of work to do."

Torrance followed him in a daze: through the small ship and the tube, into the alien, down a corridor and a ramp to the zoological hold. Van Rijn gestured at the spacemen posted on guard lest the Eksers make a sally. They drew their guns and joined him, their weary slouch jerking to alertness when he stopped before an air lock.

"*Those?*" sputtered Torrance. "But—I thought—"

"You thought what they hoped you would think," said Van Rijn grandly. "The scheme was good. Might have worked, not counting the Addkerkops, except that Nicholas van Rijn was here. Now, then. We go in and take them all out, making a good show of our weapons. I hope we need not get too tough with them. I expect not, when we explain by drawings how we understand all their secret. Then they should take us to Valhalla, as we can show by those pretty astronomical diagrams Captain Torrance has already prepared. They will cooperate under threats, as prisoners, at first. But on the voyage, we can use the standard means to establish alimentary communications... no, terror and taxes, I mean rudimentary... anyhow, we get the idea across that all humans are not Adderkops and we want to be friends and sell them things. Hokay? We go!"

He marched through the air lock, scooped up a helmet beast, and bore it kicking out of its cage.

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Torrance didn't have time for anything en route except his work. First the entry hole in the prize must be sealed, while supplies and equipment were carried over from the *Hebe G.B.* Then the yacht must be cast loose under her own hyperdrive; in the few hours before her converter quite burned out, she might draw an Adderkop in chase. Then the journey commenced, and though the Eksers laid a course as directed, they must be constantly watched lest they try some suicidal stunt. Every spare moment must be devoted to the urgent business of achieving a simple common language with them. Torrance must also supervise his crew, calm their fears, and maintain a detector-watch for enemy vessels. If any had been detected, the humans would have gone off hyperdrive and hoped they could lie low. None were, but the strain was considerable.

Occasionally he slept.

Thus he got no chance to talk to Van Rijn at length. He assumed the merchant had had a lucky hunch, and let it go at that.

Until Valhalla was a tiny yellow disc, outshining all other stars; a League patrol ship closed on them; and, explanations being made, it gave them escort as they moved at sublight speed toward Freya.

The patrol captain intimated he'd like to come aboard. Torrance stalled him. "When we're in orbit, Freeman Agilik, I'll be delighted. But right now, things are pretty disorganized. You can understand that, I'm sure."

He switched off the alien telecom he had now learned to operate. "I'd better go below and clean up," he said. "Haven't had a bath since we abandoned the yacht. Carry on, Freeman Lafarge." He hesitated. "And—uh—Freeman Jukh-Barklakh."

Jukh grunted something. The gorilloid was too busy to talk, squatting where a pilot seat should have been, his big hands slapping control plates as he edged the ship into a hyperbolic path. Barklakh, the helmet beast on his shoulders, who had no vocal cords of his own, waved a tentacle before he dipped it into the protective shaftlet to

turn a delicate adjustment key. The other tentacle remained buried on its side of the gorilloid's massive neck, drawing nourishment from the bloodstream, receiving sensory impulses, and emitting the motor-nerve commands of a skilled space pilot.

At first the arrangement had looked vampirish to Torrance. But though the ancestors of the helmet beasts might once have been parasites on the ancestors of the gorilloids, they were so no longer. They were symbionts. They supplied the effective eyes and intellect, while the big animals supplied strength and hands. Neither species was good for much without the other; in combination, they were something rather special. Once he got used to the idea, Torrance found the sight of a helmet beast using its claws to climb up a gorilloid no more unpleasant than a man in a historical stereopic mounting a horse. And once the helmet beasts were used to the idea that not all humans were enemies, they showed a positive affection for them.

Doubtless they're thinking what lovely new specimens we can sell them for their zoo, reflected Torrance. He slapped Barklakh on the shell, patted Jukh's fur, and left the bridge.

A sponge bath of sorts and fresh garments took the edge off his weariness. He thought he'd better warn Van Rijn, and knocked at the cabin which the merchant had curtained off as his own.

"Come in," boomed the bass voice. Torrance entered a cubicle blue with smoke. Van Rijn sat on an empty brandy case, one hand holding a cigar, the other holding Jeri, who was snuggled on his lap.

"Well, sit down, sit down," he roared cordially. "You find a bottle somewhere in all those dirty clothes in the corner."

"I stopped by to tell you, sir, we'll have to receive the captain of our escort when we're in orbit around Freya, which'll be soon. Professional courtesy, you know. He's naturally anxious to meet the Eks—uh—the Togru-Kon-Tanakh."

"Hokay, pipe him aboard, lad." Van Rijn scowled. "Only make him bring his own bottle, and not take too long. I want to land, me, I'm sick of space. I think I'll run barefoot over the soft cool acres and acres of Freya, by damn!"

"Maybe you'd like to change clothes?" hinted Torrance.

"Ooh!" squeaked Jeri, and ran off to the cabin she sometimes occupied.

Van Rijn leaned back against the wall, hitched up his sarong and crossed his shaggy legs as he said: "If that captain comes to meet the Eksers, so let him meet the Eksers. I stay comfortable like I am. And I will not entertain him with how I figured out who they were. That I keep exclusive, for sale to what news syndicate bids highest. Understand?"

His eyes grew unsettlingly sharp. Torrance gulped. "Yes, sir."

"Good. Now do sit down, boy. Help me put my story in order. I have not your fine education, I was a poor lonely hardworking old man from I was twelve, so I would need some help making my words as elegant as my logic."

"Logic?" echoed Torrance, puzzled. He tilted the bottle, chiefly because the tobacco haze in here made his eyes smart. "I thought you guessed—"

"What? You know me so little as that? No, no, by damn. Nicholas van Rijn never guesses. I *knew*." He reached for the bottle, took a hefty swig, and added magnanimously, "That is, after Yamamura found the gorilloids alone could not be the peoples we wanted. Then I sat down and uncluttered my brains and thought it all over.

"See, it was simple eliminations. The elephantoid was out right away. Only one of him. Maybe, in emergency, one could pilot this ship through space—but not land it, and pick up wild animals, and care for them, and all else. Also, if some things go wrong, he is helpless."

Torrance nodded. "I did consider it from the spaceman's angle," he said. "I was inclined to rule out the elephantoid on that ground. But I admit I didn't see the animal-collecting aspect made it altogether impossible that this could be a one-being expedition."

"He was pretty too big anyhow," said Van Rijn. "As for the tiger apes, like you, I never took them serious. Maybe their ancestors was smaller and more biped, but this species is reverting to quadruped again. Animals do not specialize in being everything. Not brains and size and carnivore teeth and cat claws, all to once.

"The caterpiggles looked hokay till I remembered that time you accidental turned on the bestonkered emergency acceleration switch. Unless hooked in place, what such a switch would not be except in special cases, it fell rather easy. So easy that its own weight would make it drop open under three Earth gravities. Or at least there would always be serious danger of this. Also, that shelf you bumped into, they wouldn't build shelves so light on high-gravity planets."

He puffed his cigar back to furnace heat. "Well, so might be the tentacle centaurs," he continued. "Which was bad for us, because hydrogen and oxygen explode. I checked hard through the reports on the ship, hoping I could find something that would eliminate them. And by damn, I did. For this I will give St. Dismas an altar cloth, not too expensive. You see, the Eksers is kind enough to use copper oxide rectifiers, exposed to the air. Copper oxide and hydrogen, at a not very high temperature such as would soon develop from strong electricking, they make water and pure copper. Poof, no more rectifier. So therefore ergo, this ship was not designed for hydrogen breathers." He grinned. "You has had so much high scientific education you forgot your freshlyman chemistry."

Torrance snapped his fingers and swore at himself.

"By eliminating, we had the helmet beasts," said Van Rijn. "Only they could not possible be the builders. True, they could handle certain tools and controls, like that buried key; but never all of it. And they are so slow and small. How could they ever stayed alive long enough to invent spaceships? Also, animals that little don't got room for real

brains. And neither armored animals nor parasites ever get much. Nor do they get good eyes. And yet the helmet beasts seemed to have very good eyes, as near as we could tell. They looked like human eyes, anyhow.

"I remembered there was both big and little cubbyholes in these cabins. Maybe bunks for two kinds of sleeper? And I thought, is the human brain a turtle just because it is armored in bone? A parasite just because it lives off blood from other places? Well, maybe some people I could name but won't, like Juan Harleman of the Venusian Tea & Coffee Growers, Inc., has parasite turtles for brains. But not me. So there I was. Q.," said Van Rijn smugly, "E.D."

Hoarse from talking, he picked up the bottle. Torrance sat a few minutes more, but as the other seemed disinclined to conversation, he got up to go.

Jeri met him in the doorway. In a slit and topless blue gown which fitted like a coat of lacquer, she was a fourth-order stun-blast. Torrance stopped in his tracks. Her gaze slid slowly across him, as if reluctant to depart.

"Mutant sea-otter coats," murmured Van Rijn dreamily. "Martian firegems. An apartment in the Stellar Towers."

She scampered to him and ran her fingers through his hair. "Are you comfortable, Nicky, darling?" she purred. "Can't I do something for you?"

Van Rijn winked at Torrance. "Your technique, that time on the bridge. I watched and it was lousy," he said to the captain. "Also, you are not old and fat and lonesome; you have a happy family for yourself."

"Uh—yes," said Torrance. "I do." He let the curtain drop and returned to the bridge.

**THE END**

## TERRITORY

Joyce DAVISSON awoke as if she had been stabbed.

The whistle came again, strong enough to penetrate mortar and metal and insulation, on into her eardrums. She sat up in the dark with a gasp of recognition. When last she heard that wildcat wail, it was in the Chabanda, and it meant that two bands were hunting each other. But then she had been safely aloft in a flitter, armed men on either side of her and a grave Ancient for guide. What she saw and heard came to her amplified by instruments that scanned the ice desert glittering beneath. Those tiger-striped warriors who slew and died were only figures in a screen. She had felt sorry for them, yet somehow they were not quite real: individuals only, whom she had never met, atoms that perished because their world was perishing. Her concern was with the whole.

Now the whistle was against her station.

It couldn't be!

An explosion went crump. She heard small things rattle on her desk top and felt her bed shaken. Suddenly the glissandos were louder in her head, and a snarl of drum-taps accompanied them, a banging on metal and a crashing as objects were knocked off shelves. The attackers must have blown down the door of the machine section and swarmed through. Only where could they have gotten the gunpowder?

Where but in Kusulongo the City?

That meant the Ancients had decided the humans were better killed. The fear of death went through Joyce in a wave. It passed on, leaving bewilderment and pain, as if she were a child struck for no reason. Why had they done this to her, who came for nothing but to help them?

Feet pounded in the hall just outside the Terrestrialized section of the dome. The mission's native staff had roused and were coming out of their quarters with weapons to hand. She heard savage yells. Then, farther off among the machines, combat broke loose. Swords clattered, tomahawks cracked on bone, the pistol she had given Uulobu spoke with an angry snap. But her gang couldn't hold out long. The attackers had to be Shanga, from the camp in the oasis just under Kusulongo the Mountain. No other clan was near, and the Ancients themselves never fought aggressively. But there were hundreds of male Shanga in the oasis, while the mission had scarcely two dozen trustworthy t'Kelans.

Heavily armored against exterior conditions, the human area would not be entered as easily as the outside door of the machine section had been destroyed. But once the walls were cracked...

Joyce bounded to her feet. One hand passed by the main switch plate on its way to her gear rack, and the lights came on. The narrow, cluttered room, study as well as sleeping place, looked somehow distorted in that white glow. Because I'm scared, she realized. I'm caught in a living nightmare. Nerve and muscle carried on without her mind. She leaped into the form-fitting Long John and the heavy fabricord suit. Drawing the skin-thin gloves over her hands, she connected their wiring to the electric net woven into the main outfit. Now: kerofoam-soled boots; air renewal tank and powerpack on the back; pistol and bandolier; pouched belt of iron rations; minicom in breast pocket; vitryl helmet snugged down on the shoulders but faceplate left open for the time being.

Check all fasteners, air system, heat system, everything. The outdoors is lethal on t'Kela. The temperature, on this summer night in the middle latitudes, is about sixty degrees below zero Celsius. The partial pressure of nitrogen will induce narcosis, the ammonia will burn out your lungs. There is no water vapor that your senses can detect; the air will suck you dry. None of these factors differ enough from Earth to kill you instantly. No, aided by an oxygen content barely sufficient to maintain your life, you will savor the process for minutes before you even lose unconsciousness.

And the Shanga out there, now busily killing your native assistants, have gunpowder to break down these walls. Joyce whirled about. The others! There was no intercom; two dozen people in one dome didn't need any. She snatched at the door of the room adjoining hers. Nothing happened. "Open up, you idiot!" she heard herself scream above the noise outside. "Come along! We've got to get away..."

A hoarse basso answered through the panels, "What you mean, open up? You locked yourself in, by damn!"

Of course, of course, Joyce's mind fumbled. Her pulse and the swelling racket of battle nearly drowned thought. She'd fastened this door on her own side. During her time with the mission itself, there had never been any reason to do so. But then Nicholas van Rijn landed, and got himself quartered next to her, and she had enough trouble by day fending off his ursine advances... She pushed the switch.

The merchant rolled through. Like most Esperancians, Joyce was tall, but she did not come up to his neck. His shoulders filled the doorway and his pot belly strained the fabricord suit that had been issued him. Hung about with survival equipment, he looked still more monstrous than he had done when snorting his way around the dome in snuff-stained finery of lace and ruffles. The great hooked nose jutted from an open helmet, snuffing the air as if for a scent of blood.

"Hah!" he bawled. Greasy black hair, carefully ringleted to shoulder length, swirled as he looked from side to side; the waxed mustache and goatee threatened every comer like horns. "What in the name of ten times ten to the tenth damned souls on a logarithmic spiral to hell is going on here for fumblydiddles? I thought, me, you had anyhow the trust of those natives!"

"The others..." Joyce choked. "Come on, let's get together with them."

Van Rijn nodded curtly, so that his several chins quivered, and let her take the lead. Personal rooms in the human section faced the same corridor, each with a door opening onto that as well as onto its two neighbors. Joyce's room happened to be at the end of the row, with the machine storage section on its farther side. Unmarried and fond of privacy, she had chosen that arrangement when she first came here. The clubroom was at the hall's other terminus, around the curve of the dome. As she emerged from her quarters, Joyce saw door after door gaping open. The only ones still closed belonged to chambers which nobody occupied, extras built in the anticipation of outside visitors like Van Rijn's party. So everyone else had already gotten into their suits and down to the clubroom, the fixed emergency rendezvous. She broke into a run. Van Rijn's ponderous jog trot made a small earthquake behind her. Gravity on t'Kela was about the same as on Earth or Esperance.

The only thing that's the same, Joyce thought wildly. For an instant she was nearly blinded by the recollection of her home on the green planet of the star called Pax – a field billowing with grain, remote blue mountains, the flag of the sovereign world flying red and gold against a fleecy sky, and that brave dream which had built the Commonalty.

It roared at her back. The floor heaved underfoot. As she fell, the boom came again, and yet again. The third explosion pierced through. A hammerblow of concussion followed.

Striking the floor, she rolled over. Her head rattled from side to side of her helmet. The taste of blood mixed with smoke in her mouth. She looked back down the corridor through ragged darknesses that came and went before her eyes. The wall at the end, next to her own room, was split and broken. Wild shadowy figures moved in the gloom beyond the twisted structural members.

"They blew it open," she said stupidly.

"Close your helmet," Van Rijn barked. He had already clashed his own faceplate to. The amplifier brought her his gravelly tones, but a dullness would not let them through to her brain.

"They blew it open," she repeated. The thing seemed too strange to be real.

A native leaped into the breach. He could stand Terrestrial air and temperature for a while if he held his breath. And t'Kelan atmosphere, driven by a higher pressure, was already streaming past him. The stocky, striped figure poised in a tension like that of the strung bow he aimed. Huge slit-pupiled eyes glared in the light from the fluoros.

An Esperancian technician came running around the bend of the corridor. "Joyce!" he cried. "Freeman Van Rijn! Where..." The bow twanged. A barbed arrowhead ripped his suit. A moment afterward the air seemed full of arrows, darts, spears, hurled from the murk. Van Rijn threw himself across Joyce. The technician spun on his heel and fled.

Van Rijn's well-worn personal blaster jumped into his fist. He fired from his prone position. The furry shape in the breach tumbled backward. The shadows behind withdrew from sight. But the yell and clatter went on out there.

A first ammoniacal whiff stung Joyce's nostrils. "Pox and pestilence," Van Rijn growled. "You like maybe to breathe that dragon belch?" He rose to his knees and closed her faceplate. His little black close-set eyes regarded her narrowly. "So, stunned, makes that the way of it? Well, hokay, you is a pretty girl with a nice figure and stuff even if you should not cut your hair so short. Waste not, want not. I rescue you, ha?"

He dragged her across one shoulder, got up, and backed wheezily along the hall, his blaster covering the direction of the hole. "Ugh, ugh," he muttered, "this is not a job for a poor old fat man who should be at home in his nice office on Earth with a cigar and maybe a wee glass Genever. The more so when those misbegotten snouthearts he must use for help will rob him blind. *Ja*, unscrew his eyeballs they will, so soon as he isn't looking. But all the factors at all the trading posts are such gruntbrains that poor Nicholas van Rijn must come out his own selfs, a hundred light-years in the direction of Orion's bellybutton he must come, and look for new trading possibilities. Else the wolves-with-rabies competition tears his Solar Spice & Liquors Company in shreds and leaves him prostitute in his old age... Ah, here we is. Downsy-daisy."

Joyce shook her head as he eased her to the floor. Full awareness had come back, and her knees didn't wobble much. The clubroom door was in front of her. She pushed the switch. The barrier didn't move. "Locked," she said.

Van Rijn pounded till it shivered. "Open up!" he bellowed. "Thunder and thighbones, what is this farce?"

A native raced around the curve of the hall. Van Rijn turned. Joyce shoved his blaster aside. "No, that's Uulobu." The t'Kelan must have exhausted his pistol and thrown it away, for a tomahawk now dripped in his hand. Three other autochthones bounded after him, swords and hatchets aloft. Their kilts were decorated with the circle and square insigne of the Shanga clan. "Get them!"

Van Rijn's blaster spat fire. One of the invaders flopped over. The others whirled to escape. Uulobu yowled and threw his tomahawk. The keen obsidian edge struck a Shanga and knocked him down, bleeding. Uulobu yanked the cord that ran between his weapon and wrist, retrieved the ax, and threw it again to finish the job.

Van Rijn returned to the door. "You termite-bitten cowards, let us in!" As his language got bluer, Joyce realized what must have happened. She pounded his back with her fists, much as he was pounding the door, until he stopped and looked around.

"They wouldn't abandon us," Joyce said. "But they must think we've been killed. When Carlos saw us, back there in the hall, we were both lying on the floor, and there were so many missiles... They aren't in the clubroom any longer. They locked the door to delay the enemy while they took a different way to the spaceships."

"Ah, *ja, ja*, must be. But what do we do now? Blast through the door to follow?"

Uulobu spoke in the guttural language of the Kusulongo region. "All of us are slain or fled, sky-female. No more battle. The noise you hear now is the Shanga plundering. If they find us, they will fill us with arrows. Two guns

cannot stop that. But I think if we go back among the iron-that-moves, we can slip out that way and around the dome."

"What's he besputtering about?" Van Rijn asked.

Joyce translated. "I think he's right," she added. "Our best chance is to leave through the machine section. It seems deserted for the time being. But we'd better hurry."

"So. Let this pussycat fellow go ahead, then. You stay by me and cover my back, *nie?*"

They trotted back the way they had come. Hoarfrost whitened the walls and made the floor slippery, as water vapor condensed in the t'Kelans cold. The breach into the unlighted machine section gaped like a black mouth. Remotely through walls, Joyce heard ripping, smashing and exultant shouts. The work of years was going to pieces around her. Why? she asked in pain, and got no answer.

Uulobu's eyes, more adaptable to dark than any human's, probed among bulky shapes as they entered the storage area. Vehicles were parked here: four groundcars and as many flitters. In addition, this long chamber housed the specialized equipment of the studies the Esperancians had made, seeking a way to save the planet. Most lay in wreckage on the floor.

An oblong of dim light, up ahead, was the doorway to the outside. Joyce groped forward. Her boot struck something, a fallen instrument. It clanked against something else.

There came a yammer of challenge. The entrance filled with a dozen shapes. They whipped through and lost themselves among shadows and machines before Van Rijn could fire. Uulobu hefted his tomahawk and drew his knife. "Now we must fight for our passage," he said unregretfully.

"Cha-a-a-arge!" Van Rijn led the way at a run. Several t'Kelans closed in on him. Metal and polished stone whirled in the murk. The Earthman's blaster flared. A native screamed. Another native got hold of the gun arm and dragged it downward. Van Rijn tried to shake him loose. The being hung on, though the human clubbed him back and forth against his fellows.

Uulobu joined the ruckus, stabbing and hacking with carnivore glee. Joyce could not do less. She had her own pistol out, a slug-thrower. Something bumped into the muzzle. Fangs and eyes gleamed at her in what light there was. A short spear poised, fully able to pierce her suit. Even so, she had never done anything harder than to pull the trigger. The crack of the gun resounded in her own skull.

Then for a while it was jostling, scrabbling, firing, falling, and wrestling lunacy. Now and again Joyce recognized Uulobu's screech, the battle cry of his Avongo clan. Van Rijn's voice sounded above the din like a trumpeted, "St. Dismas help us! Down with mangy dogs!" Suddenly it was over. The guns had been too much. She lay on the floor, struggling for breath, and heard the last few Shanga run out. Somewhere a wounded warrior groaned, until Uulobu cut his throat.

"Up with you," Van Rijn ordered between puffs. "We got no time for making rings around the rosies."

Uulobu helped her rise. He was too short to lean on very well, but Van Rijn offered her an arm. They staggered out of the door, into the night.

There was no compound here, only the dome and then t'Kela itself. Overhead glittered unfamiliar constellations. The larger moon was aloft, nearly full, throwing dim coppery light on the ground. West and south stretched a rolling plain, thinly begrown with shrubs not unlike Terrestrial sagebrush in appearance: low, wiry, silvery-leaved. Due north rose the sheer black wall of Kusulongo the Mountain, jagged against the Milky Way. The city carved from its top could be seen only as a glimpse of towers like teeth. Some kilometers eastward, at its foot, ran the sacred Mangivolo River. Joyce could see a red flash of moonlight on liquid ammonia. The trees of that oasis where the Shanga were camped made a blot of shadow. The hills that marched northward from Kusulongo gleamed with ice, an unreal sheen.

"Hurry," Van Rijn grated. "If the other peoples think we are dead, they will raise ship more fast than they can." His party rounded the dome at the reeling pace of exhaustion. Two tapered cylinders shimmered under the moon, the mission's big cargo vessel and the luxury yacht which had brought Van Rijn and his assistants from Earth. A couple of dead Shanga lay nearby. The night wind roused their fur. It had been a fight to reach safety here. Now the ramps were retracted and the air locks shut. As Van Rijn neared, the whine of engines shivered forth.

"Hey!" he roared. "You clabberbrains, wait for me!"

The yacht took off first, hitting the sky like a thunderbolt. The backwash of air bowled Van Rijn over. Then the Esperancian craft got under weigh. The edge of her drive field caught Van Rijn, picked him up, and threw him several meters. He landed with a crash and lay still.

Joyce hurried to him. "Are you all right?" she choked. He was a detestable old oaf, but the horror of being marooned altogether alone seized upon her.

"Oo-oo-oo," he groaned. "St. Dismas, I was going to put a new stained-glass window in your chapel at home. Now I think I will kick in the ones you have got."

Joyce glanced upward. The spaceships flashed like rising stars, and vanished. "They didn't see us," she said numbly.

"Tell me more," Van Rijn snorted.

Uulobu joined them. "The Shanga will have heard," he said. "They will come out here to make sure, and find us. We must escape."

Van Rijn didn't need that translated. Shaking himself gingerly, as if afraid something would drop off, he crawled to his feet and lurched back toward the dome. "We get a flitter, *nie?*" he said.

"The groundcars are stocked for a much longer period," Joyce answered. "And we'll have to survive until someone comes back here."

"With the pest-riddled planeteezers chasing us all the while," Van Rijn muttered. "Joy forever, unconfined!"

"We go west, we find my people," Uulobu said. "I do not know where the Avongo are, but other clans of the Rokulela Horde must surely be out between the Narrow Land and the Barrens."

They entered the machine section. Joyce stumbled on a body and shuddered. Had she killed that being herself?

The groundcars were long and square-built; the rear four of the eight wheels ran on treads. The accumulators were fully charged, energy reserve enough to drive several thousand rough kilometers and maintain Earth-type conditions inside for a year. There were air recyclers and sufficient food to keep two humans going at least four months. Six bunks, cooking and sanitary facilities, maps, navigation equipment, a radio transceiver, spare parts for survival gear – everything was there. It had to be, when you traveled on a planet like this.

Van Rijn heaved his bulk through the door, which was not locked, and settled himself in the driver's seat. Joyce collapsed beside him. Uulobu entered with uneasy eyes and quivering whiskers. Only the Ancients, among t'Kelans, liked riding inside a vehicle. That was no problem, though, Joyce recalled dully. On field trips, once you had established a terrestroid environment within, your guides and guards rode on top of the car, talking with you by intercom. Thus many kilometers had been covered, and much had been learned, and the plans had been drawn that would save a world... and now!

Van Rijn's ham hands moved deftly over the controls. "In my company we use Landmasters," he said. "I like not much these Globetrotters. But, sometimes our boys have to... um... borrow one from the competition, so we know how to... Ah." The engine purred to life. He moved out through the door, riding the field drive at its one-meter ceiling instead of using the noisier wheels.

But he could have saved his trouble. Other doors in the dome were spewing forth Shanga. There must be a hundred of them, Joyce thought. Van Rijn's lips skinned back from his teeth. "You want to play happy fun games yet, ha?" He switched on the headlights.

A warrior was caught in the glare, dazzled by it so that he stood motionless, etched against blackness. Joyce's eyes went over him, back and forth, as if something visible could explain why he had turned on her. He was a typical t'Kelan of this locality; races varied elsewhere, as on most planets, but no more than among humans.

The stout form was about 150 centimeters tall, heavily steatopygous to store as much liquid as the drying land afforded. Hands and feet were nearly manlike, except for having thick blue nails and only four digits apiece. The fur that covered the whole body was a vivid orange, striped with black, a triangle of white on the chest. The head was round, with pointed ears and enormous yellow cat-eyes, two fleshy tendrils on the forehead, a single nostril crossing the broad nose, a lipless mouth full of sharp white teeth framed in restless cilia. This warrior carried a sword – the bladelike horn of a gondyanga plus a wooden handle – and a circular shield painted in the colors of the Yagola Horde to which the Shanga clan belonged.

"Beep, beep!" Van Rijn said. He gunned the car forward.

The warrior sprang aside, barely in time. Others tried to attack. Joyce glimpsed one with a bone piston whistle in his mouth. The Yagola never used formal battle cries, but advanced to music. A couple of spears clattered against the car sides. Then Van Rijn was through, bounding away at a hundred KPH with a comet's tail of dust behind.

"Where we go now?" he demanded. "To yonder town on the mountain? You said they was local big cheeses."

"The Ancients? No!" Joyce stiffened. "They must be the ones who caused this."

"Ha? Why so?"

"I don't know, I don't know. They were so helpful before... But it has to be them. They incited... No one else could have. W-we never made any enemies among the clans. As soon as we had their biochemistry figured out, we synthesized medicines and – and helped them..." Joyce found suddenly that she could cry. She leaned her helmet in her hands and let go all emotional holds.

"There, there, everything's hunky-dunky," Van Rijn said. He patted her shoulder. "You been a brave girl, as well as pretty. Go on, now, relax, have fun."

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T'Kela rotated once in thirty hours and some minutes, with eight degrees of axial tilt. Considerable night remained when the car stopped, a hundred kilometers from Kusulongo, and the escapers made camp. Uulobu took a sleeping bag outside while the others Earth-conditioned the interior, shucked their suits, and crawled into bunks. Not even Van Rijn's snores kept Joyce awake.

Dawn roused her. The red sun climbed from the east with a glow like dying coals. Though its apparent diameter was nearly half again that of Sol seen from Earth or Pax from Esperance, the light was dull to human eyes; shadows lay thick in every dip and gash, and the horizon was lost in darkness. The sky was deep purple, cloudless, but filled to the south with the yellow plumes of a dust storm. Closer by, the plain stretched bare, save for sparse gray vegetation, strewn boulders, a coldly shimmering ice field not far nothward. One scavenger foul wheeled overhead on leathery-feathered wings.

Joyce sat up. Her whole body ached. Remembering what had happened made such an emptiness within that she hardly noticed. She wanted to roll over in the blankets, bury her head, and sleep again. Sleep till rescue came, if it ever did.

She made herself rise, go into the bath cubicle, wash, and change into slacks and blouse. With refreshment came hunger. She returned to the main body of the car and began work at the cooker.

The smell of coffee wakened Van Rijn. "Ahhh!" Whale-like in the Long John he hadn't bothered to remove, he wallowed from his bunk and snatched at a cup. "Good girl." He sniffed suspiciously. "But no brandy in it? After our troubles, we need brandy."

"No liquor here," she snapped.

"What?" For a space the merchant could only goggle at her. His jowls turned puce. His mustaches quivered. "Nothings to drink?" he strangled. "Why-why-why, this is extrarageous. Who's responsible? By damn, I see to it he's blacklisted from here to Polaris!"

"We have coffee, tea, powdered milk and fruit juices," Joyce said. "We get water from the ice outside. The chemical unit removes ammonia and other impurities. One does not take up storage space out in the field with liquor, Freeman Van Rijn."

"One does if one is civilized. Let me see your food stocks." He rummaged in the nearest locker. "Dried meat, dried vegetables, dried... Death-and-destruction!" he wailed. "Not so much as one jar caviar? You want me to crumble away?"

"You might give thanks you're alive."

"Not under this condition... Well, I see somebody had one brain cell still functional and laid in some cigarettes." Van Rijn grabbed a handful and crumbled them into a briar pipe he had stuffed in his bosom. He lit it. Joyce caught a whiff, gagged, and returned to work at the cooker, banging the utensils about with more ferocity than was needful.

Seated at the folding table next to one of the broad windows, Van Rijn crammed porridge down his gape and peered out at the dim landscape. "Whoof, what a place. Like hell with the furnaces on the fritz. How long you been here, anyways?"

"Myself, about a year, as a biotechnician." She decided it'll be best to humor him. "Of course, the Esperancian mission has been operating for several years."

"Ja, that I know. Though I am not sure just how – I was only here a couple of days, you remember, before the trouble started. And any planet is so big and complicated a thing, takes long to understand it even a little. Besides, I had some other work along I must finish before investigating the situation here."

"I admit being puzzled why you came. You deal in spices and things, don't you? But there's nothing here that a human would like. We could digest some of the proteins and other biological compounds – they aren't all poisonous to us – but they lack things we need, like certain amino acids, and they taste awful."

"My company trades with nonhumans too," Van Rijn explained. "Not long ago, my research staff at home came upon the original scientific reports, from the expedition who found this planet fifteen years ago. This galaxy is so big no one can keep track of everything while it happens. Always we are behind. But anyhow, was mention of some wine that the natives grow."

"Yes, kungu. Most of the clans in this hemisphere make it. They raise the berries along with some other plants that provide fiber. Not that they're farmers. A carnivorous race, nomadic except for the Ancients. But they'll seed some ground and come back in time to harvest it."

"Indeed. Well, as you know, the first explorers here was from Throra, which is a pretty similar planet to this only not so ugly. They thought the kungu was delicious. They even wanted to take seeds home, but found because of ecology and stuffs, the plant will only grow on this world. Ah-ha, thought Nicholas van Rijn, a chance maybe to build up a very nice little trade with Throra. So because of not having nobody worth trusting that was on Earth to be sent here, I came in my personals to see. Oh, how bitter to be so lonely!" Van Rijn's mouth drooped in an attempt at pathos. One hairy hand stole across the table and closed on Joyce's.

"Here come Uulobu," she exclaimed, pulling free and jumping to her feet. *In the very nick of time, bless both his hearts!* she thought.

The t'Kelan loped swiftly across the plan A small animal that he had killed was slung across his shoulders. He was clad differently from the Shanga: in the necklace of fossil shells and the loosely woven blue kilt of his own Avongo clan and Rokulela Horde. A leather pouch at his waist had been filled with liquid.

"I see he found an ammonia well," Joyce chattered, brightly and somewhat frantically, for Van Rijn was edging around the table toward her. "That's what they have those tendrils for, did you know? Sensitive to any trace of ammonia vapor. This world is so dry. Lots of frozen water, of course You find ice everywhere you go on the planet. Very often hundreds of square kilometers at a stretch. You see, the maximum temperature here is forty below zero Celsius. But ice doesn't do the indigenous life any good. In fact, it's one of the things that are killing this world."

Van Rijn grumped and moved to the window. Uulobu reached the car and said into the intercom, "Sky-female, I have found spoor of hunters passing by, headed west toward the Lubambaru. They can only be Rokulela. I think we can find them without great trouble. Also I have quenched my thirst and gotten meat for my hunger. Now I must offer the Real Ones a share."

"Yes, do so for all of us," Joyce answered.

Uulobu began gathering sticks for a fire.

"What he say?" Van Rijn asked. Joyce translated. "So. What use to us, making league with savages out here? We only need to wait for rescue."

"If it comes," Joyce said. She shivered. "When they hear about this at Esperance, they'll send an expedition to try and learn what went wrong. But not knowing we're alive, they may not hurry it enough."

"My people will," Van Rijn assured her. "The Polesotechnic League looks after its own, by damn. So soon as word gets to Earth, a warship comes to full investigation. Inside a month."

"Oh, wonderful," Joyce breathed. She went limp and sat down again.

Van Rijn scowled. "Natural," he ruminated, "they cannot search a whole planet. They will know I was at that bestinkered KusuLongo place, and land there. I suppose those Oldsters or Seniles or whatever you call them is sophisticated enough by now in interstellar matters to fob the crew off with some story, if we are not nearby to make contact. So... we must remain in their area, in radio range. And radio range has to be pretty close on a red dwarfs planet, where ionosphere characteristics are poor. But close to our enemies we cannot come so well, if they are whooping after us the whole time. They can dig traps or throw crude bombs or something... one way or other, they can kill us even in this car. Ergo, we must establish ourselves as too strong to attack, in the very neighborhood of KusuLongo. This means we need allies. So you have right, we must certain go along to your friend's peoples."

"But you can't make them fight their own race!" Joyce protested.

Van Rijn twirled his mustache. "Can't I just?" he grinned.

"I mean... I don't know how, in any practical sense... but even if you could, it would be wrong."

"Um-m-m." He regarded her for a while. "You Esperancers is idealists, I hear. Your ancestors settled your planet for a utopian community, and you is still doing good for everybody even at this low date, *nie?* Your mission to help this planet here was for no profit, except it makes you feel good..."

"And as a matter of foreign policy," Joyce admitted, under the honesty fetish of her culture. "By assisting other races, we gain their goodwill and persuade them, a little, to look at things our way. If Esperance has enough such friends, we'll be strong and influential without having to maintain armed services."

"From what I see, I doubt very much you ever make nice little vestrymen out of these t'Kelans."

"Well... true... they are out-and-out carnivores. But then, man started as a carnivorous primate, didn't he? And the t'Kelans in this area *did* achieve an agricultural civilization once, thousands of years ago. That is, grain was raised to feed meat animals. KusuLongo the City is the last remnant. The ice age wiped it out otherwise, leaving savagery – barbarism at most. But given improved conditions, I'm sure the autochthones could recreate it. They'll never have unified nations or anything, as we understand such things. They aren't gregarious enough. But they could develop a world order and adopt machine technology."

"Except, from what you tell me, those snakes squatting on top of the mountain don't want that."

Joyce paused only briefly to wonder how a snake could squat before she nodded. "I guess so. Though I can't understand why. The Ancients were so helpful at first."

"Means they need to have some sense beaten into their skullbones. Hokay, so for the sake of t'Kela's long-range good, we arrange to do the beating, you and I."

"Well... maybe... but still..."

Van Rijn patted her head. "You just leave the philosophizings to me, little girl," he said smugly. "You only got to cook and look beautiful."

Ulobu had lit his fire and thrown the eyeballs of his kill onto it. His chant to his gods wailed eerily through the car wall. Van Rijn clicked his tongue. "Not so promising materials, that," he said. "You civilize them if you can. I am content to get home unpunctured by very sharp-looking spears, me." He rekindled his pipe and sat down beside her. "To do this, I must understand the situation. Suppose you explain. Some I have heard before, but no harm to repeat." He patted her knee. "I can always admire your lips and things while you talk."

Joyce got up for another cup of coffee and reseated herself at a greater distance. She forced an impersonal tone.

"Well, to begin with, this is a very unusual planet. Not physically. I mean, there's nothing strange about a type M dwarf star having a planet at a distance of half an A. U., with a mass about forty percent greater than Earth's."

"So much? Must be low density, then. Metal-poor."

"Yes. The sun is extremely old. Fewer heavy atoms were available at the time it formed with its planets. T'Kela's overall specific gravity is only four-point-four. It does have some iron and copper, of course... As I'm sure you know, life gets started slowly on such worlds. Their suns emit so little ultraviolet, even in flare periods, that the primordial organic materials aren't energized to interact very fast. Nevertheless, life does start eventually, in oceans of liquid ammonia."

"*Ja*. And usual goes on to develop photosynthesis using ammonia and carbon dioxide, to make carbohydrates and the nitrogen that the animals breathe." Van Rijn tapped his sloping forehead. "So much I have even in this dumb old bell. But why does evolution go different now and then, like on here and Throra?"

"Nobody knows for sure. Some catalytic agent, perhaps. In any event, even at low temperatures like these, all the water isn't solid. A certain amount is present in the oceans, as part of the ammonium hydroxide molecule. T'Kelan or Throran plant cells have an analogue of chlorophyll, which does the same job: using gaseous carbon dioxide and 'dissolved' water to get carbohydrates and free oxygen. The animals reverse the process, much as they do on Earth. But the water they release isn't exhaled. It remains in their tissues, loosely held by a specialized molecule. When an

organism dies and decays, this water is taken up by plants again. In other words, H-two-O here acts very much like nitrogenous organic material on our kind of planets."

"But the oxygen the plants give off, it attacks ammonia."

"Yes. The process is slow, especially since solid ammonia is denser than the liquid phase. It sinks to the bottom of lakes and oceans, which protects it from the air. Nevertheless, there is a gradual conversion. Through a series of steps, ammonia and oxygen yield free nitrogen and water. The water freezes out. The seas shrink; the air becomes poorer in oxygen; the desert areas grow."

"This I know from Throra. But there a balance was struck. Nitrogen-fixing bacteria evolved and the drying-out was halted, a billion years ago. So they told me once."

"Throra was lucky. It's a somewhat bigger planet than t'Kela, isn't it? Denser atmosphere, therefore more heat conservation. The greenhouse effect on such worlds depends on carbon dioxide and ammonia vapor. Well, several thousand years ago, t'Kela passed a critical point. Just enough ammonia was lost to reduce the greenhouse effect sharply. As the temperature fell, more and more liquid ammonia turned solid and went to the bottom, where it's also quite well protected against melting. This made the climatic change catastrophically sudden. Temperatures dropped so low that now carbon dioxide also turns liquid, or even solid, through part of the year. There's still some vapor in the atmosphere, in equilibrium, but very little. The greenhouse effect really dropped off!

"Plant life was gravely affected, as you can imagine. It can't grow without carbon dioxide and ammonia to build its tissues. Animal life died out with it. Areas the size of a Terrestrial continent became utterly barren, almost overnight. I told you that the native agricultural civilization was wiped out. Worse, though, we've learned from geology that the nitrogen-fixing bacteria were destroyed. Completely. They couldn't survive the winter temperatures. So there's no longer any force to balance the oxidation of ammonia. The deserts encroach everywhere, year by year... and t'Kela's year is only six-tenths Standard. Evolution has worked hard, adapting life to the change, but the pace is now too rapid for it. We estimate that all higher animals, including the natives, will be extinct within another millennium. In ten thousand years there'll be nothing alive here."

Though she had lived with the realization for months, it still shook Joyce to talk about it. She clamped fingers around her coffee cup till they hurt, stared out the window at drifting dust, and strove not to cry.

Van Rijn blew foul clouds of smoke a while in silence. Finally he rumbled almost gently, "But you have a cure program worked out, ja?"

"Oh... oh, yes. We do. The research is completed and we were about ready to summon engineers." She found comfort in proceeding.

"The ultimate solution, of course, is to reintroduce nitrogen-fixing bacteria. Our labs have designed an extremely productive strain. It will need a suitable ecology, though, to survive: which means a lot of work with soil chemistry, a microagricultural program. We can hasten everything – begin to show results in a decade – by less subtle methods. In fact, we'll have to do so, or the death process will outrun anything that bacteria can accomplish.

"What we'll do is melt and electrolyze water. The oxygen can be released directly into the air, refreshing it. But some will go to burn local hydrocarbons. T'Kela is rich in petroleum. This burning will generate carbon dioxide, thus strengthening the greenhouse effect. The chemical energy released can also supplement the nuclear power stations we'll install: to do the electrolysis and to energize the combination of hydrogen from water with nitrogen from the atmosphere, recreating ammonia."

"A big expensive job, that," Van Rijn said.

"Enormous. The biggest thing Esperance has yet undertaken. But the plans and estimates have been drawn up. We know we can do it."

"If the natives don't go potshotting engineers for exercise after lunch."

"Yes." Joyce's blond head sank low. "That would make it impossible. We have to have the good will of all of them, everywhere. They'll have to cooperate, work with us and each other, in a planet-wide effort. And Kusulongo the City influences a quarter of the whole world! What have we done? I thought they were our friends..."

"Maybe we get some warriors and throw sharp things at them till they appreciate us," Van Rijn suggested.

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The car went swiftly, even over irregular ground. An hour or so after it had started again, Uulobu shouted from his seat on top. Through the overhead window the humans saw him lean across his windshield and point. Looking that way, they saw a dust cloud on the northwestern horizon, wider and lower than the one to the south. "Animals being herded," Uulobu said. "Steer thither, sky-folk."

Joyce translated and Van Rijn put the control bar over. "I thought you said they was hunters only," he remarked. "Herds?"

"The Horde people maintain an economy somewhere between that of ancient Mongol cattlekeepers and Amerind bison-chasers," she explained. "They don't actually domesticate the iziru or the bambalo. They did once, before the glacial era, but now the land couldn't support such a concentration of grazers. The Hordes do still exercise some control over the migrations of the herds, though, cull them, and protect them from predators."

"Um-m-m. What are these Hordes, anyhow?"

"That's hard to describe. No human really understands it. Not that t'Kelan psychology is incomprehensible. But it is nonhuman, and our mission has been so busy gathering planetographical data that we never found time to do psychological studies in depth. Words like 'pride,' 'clan,' and 'Horde' are rough translations of native terms – not very accurate, I'm sure – just as 't'Kela' is an arbitrary name of ours for the whole planet. It means 'this earth' in the Kusulongo language."

"Hokay, no need beating me over this poor old eggnoggin with the too-obvious. I get the idea. But look you, Freelady Davisson... I can call you Joyce?" Van Rijn buttered his tones. "We is in the same boat, sink or swim together, except for having no water to do it in, so let us make friends, ha?" He leaned suggestively against her. "You call me Nicky."

She moved aside. "I cannot prevent your addressing me as you wish, Freeman Van Rijn," she said in her frostiest voice.

"Heigh-ho, to be young and not so globulous again! But a lonely old man must swallow his sorrows." Van Rijn sighed like a self-pitying tornado. "Apropos swallowing, why is there not so much as one little case beer along? Just one case; one hour or maybe two of sips, to lay the sandstorms in this mummy gullet I got; is that so much to ask, I ask you?"

"Well, there isn't." She pinched her mouth together. They drove on in silence.

Presently they raised the herd: iziru, humpbacked and spike-tailed, the size of Terran cattle. Those numbered a few thousand, Joyce estimated from previous experience. With vegetation so sparse, they must needs spread across many kilometers.

A couple of natives had spied the car from a distance and came at a gallop. They rode basai, which looked not unlike large stocky antelope with tapir faces and a single long horn. The t'Kelans wore kilts similar to Uulobu's, but leather medallions instead of his shell necklace. Van Rijn stopped the car. The natives reined in. They kept weapons ready, a strung bow and a short throwing-spear.

Uulobu jumped off the top and approached them, hands outspread. "Luck in the kill, strength, health, and offspring!" he wished them in the formal order of importance. "I am Tola's son Uulobu, Avongo, Rokulela, now a follower of the sky-folk."

"So I see," the older, grizzled warrior answered coldly. The young one grinned and put his bow away with an elaborate flourish. Uulobu clapped hand to tomahawk. The older being made a somewhat conciliatory gesture and Uulobu relaxed a trifle.

Van Rijn had been watching intently. "Tell me what they say," he ordered. "Everything. Tell me what this means with their weapon foolishness."

"That was an insult the archer offered Uulobu," Joyce explained unhappily. "Disarming before the ceremonies of peace have been completed. It implies that Uulobu isn't formidable enough to be worth worrying about."

"Ah, so. These is rough peoples, them. Not even inside their own Hordes is peace taken for granted, ha? But why should they make nasty at Uulobu? Has he got no prestige from serving you?"

"I'm afraid not. I asked him about it once. He's the only t'Kelan I could ask about such things."

"Ja? How come that?"

"He's the closest to a native intimate that any of us in the mission have had. We saved him from a pretty horrible death, you see. We'd just worked out a cure for a local equivalent of tetanus when he caught the disease. So he feels gratitude toward us, as well as having an economic motive. All our regular assistants are... were impoverished, for one reason or another. A drought had killed off too much game in their territory, or they'd been dispossessed, or something like that." Joyce bit her lip. "They... they did swear us fealty... in the traditional manner... and you know how bravely they fought for us. But that was for the sake of their own honor. Uulobu is the only t'Kelan who's shown anything like real affection for humans."

"Odd, when you come here to help them. By damn, but you was a bunch of mackerel heads! You should have begun with depth psychology first of all. That fool planetography could wait... Rotten, stinking mackerel, glows blue in the dark..." Van Rijn's growl trailed into a mumble. He shook himself and demanded further translation.

"The old one is called Nyaronga, head of this pride," Joyce related. "The other is one of his sons, of course. They belong to the Gangu clan, in the same Horde as Uulobu's Avongo. The formalities have been concluded, and we're invited to share their camp. These people are hospitable enough, in their fashion... after *bona fides* has been established."

The riders dashed off. Uulobu returned. "They must hurry," he reported through the intercom. "The sun will brighten today, and cover is still a goodly ways off. Best we trail well behind so as not to stampede the animals, sky-female." He climbed lithely to the cartop. Joyce passed his words on as Van Rijn got the vehicle started.

"One thing at a time, like the fellow said shaking hands with the octopus," the merchant decided. "You must tell me much, but we begin with going back to why the natives are not so polite to anybody who works for your mission."

"Well... as nearly as Uulobu could get it across to me, those who came to us were landless. That is, they'd stopped maintaining themselves in their ancestral hunting grounds. This means a tremendous loss of respectability. Then, too, he confessed – very bashfully – that our helpers' prestige suffered because we never involved them in any fights. The imputation grew up that they were cowards."

"A warlike culture, ha?"

"N-no. That's the paradox. They don't have wars, or even vendettas, in our sense. Fights are very small-scale affairs, though they happen constantly. I suppose that arises from the political organization. Or does it? We've noticed the same thing in remote parts of t'Kela, among altogether different societies from the Horde culture."

"Explain that, if you will be so kind as to make me a little four-decker sandwich while you talk."

Joyce bit back her annoyance and went to the cooker table. "As I said, we never did carry out intensive xenological research, even locally," she told him. "But we do know that the basic social unit is the same everywhere on this world, what we call the pride. It springs from the fact that the sex ratio is about three females to one male. Living together you have the oldest male, his wives, their offspring of subadult age. All males, and females unencumbered with infants, share in hunting, though only males fight other t'Kelans. The small – um – children help out in the work around camp. So do any widows of the leader's father that he's taken in. The size of such a pride ranges up to twenty or so. That's as many as can make a living in an area small enough to cover afoot, on this desert planet."

"I see. The t'Kelan pride answers to the human family. It is just as universal, too, right? I suppose larger units get organized in different ways, depending on the culture."

"Yes. The most backward savages have no organization larger than the pride. But the Kusulongo society, as we call it – the Horde people – the biggest and most advanced culture, spread over half the northern hemisphere – it has a more elaborate superstructure. Ten or twenty prides form what we call a clan, a cooperative group claiming descent from a common male ancestor, controlling a large territory through which they follow the wild herds. The clans in turn are loosely federated into Hordes, each of which holds an annual get-together in some traditional oasis. That's when they trade, socialize, arrange marriages – newly adult males get wives and start new prides – yes, and they adjudicate quarrels, by arbitration or combat, at such times. There's a lot of squabbling among clans, you see, over points of honor or practical matters like ammonia wells. One nearly always marries within one's own Horde; it has its own dress, customs, gods, and so forth."

"No wars between Hordes?" Van Rijn asked.

"No, unless you want to call the terrible things that happen during a *Völkerwanderung* a war. Normally, although individual units from different Hordes may clash, there isn't any organized campaigning. I suppose they simply haven't the economic surplus to maintain armies in the field."

"Um-m-m. I suspect, me, the reason goes deeper than that. When humans want to have wars, by damn, they don't let any little questions of if they can afford it stop them. I doubt t'Kelans would be any different. Um-m-m." Van Rijn's free hand tugged his goatee. "Maybe here is a key that goes tick-a-lock and solves our problem, if we know how to stick it in."

"Well," Joyce said, "the Ancients are also a war preventive. They settle most inter-Horde disputes, among other things."

"Ah, yes, those fellows on the mountain. Tell me about them."

Joyce finished making the sandwich and gave it to Van Rijn. He wolfed it noisily. She sat down and stared out at the scene: brush and boulders and swirling dust under the surly red light, the dark mass of the herd drifting along, a rider who galloped back to head off some stragglers. Far ahead now could be seen the Lubambaru, a range of ice, sharp peaks that shimmered against the crepuscular sky. Faintly to her, above the murmur of the engine, came yelps and the lowing of the animals. The car rocked and bumped; she felt the terrain in her bones.

"The Ancients are survivors of the lost civilization," she said. "They hung on in their city, and kept the arts that were otherwise forgotten. That kind of life doesn't come natural to most t'Kelans. I gather that in the course of thousands of years, those who didn't like it there wandered down to join the nomads, while occasional nomads who thought the city would be congenial went up and were adopted into the group. That would make for some genetic selection. The Ancients are a distinct psychological type. Much more reserved and... intellectual, I guess you'd call it... than anyone else."

"How they make their living?" Van Rijn asked around a mouthful.

"They provide services and goods for which they are paid in kind. They are scribes, who keep records; physicians; skilled metallurgists; weavers of fine textiles; makers of gunpowder, though they only sell fireworks and keep a few cannon for themselves. They're credited with magical powers, of course, especially because they can predict solar flares."

"And they was friendly until yesterday?"

"In their own aloof, secretive fashion. They must have been plotting the attack on us for some time, though, egging on the Shanga and furnishing the powder to blow open our dome. I still can't imagine why. I'm certain they believed us when we explained how we'd come to save their race from extinction."

"Ja, no doubt. Only maybe at first they did not see all the implications." Van Rijn finished eating, belched, picked his teeth with a fingernail, and relapsed into brooding silence. Joyce tried not to be too desperately homesick.

After a long time, Van Rijn smote the control board so that it rang. "By damn!" he bellowed. "It fits together!"

"What?" Joyce sat straight.

"But I still can't see how to use it," he said.

"What do you mean?"

"Shut up, Freelady." He returned to his thoughts. The slow hours passed.

Late in the afternoon, a forest hove into sight. It covered the foothills of the Lubambaru, where an ammonia river coursed thinly and seepage moistened the soil a little. The trees were low and gnarled, with thorny blue trunks and a dense foliage of small greenish-gray leaves. Tall shrubs sprouted in thickets between them. The riders urged their iziru into the wood, posted a few pickets to keep watch, and started northward in a compact group, fifteen altogether, plus pack animals and a couple of fuzzy infants in arms. The females were stockier than the males and had snouted faces. Though hairy and homeothermic, the t'Kelans were not mammals; mothers regurgitated food for children who had not yet cut their fangs.

Old Nyaronga led the band, sword rattling at his side, spear in hand and shield on arm, great yellow eyes flickering about the landscape. His half-grown sons flanked the party, arrows nocked to bows. Van Rijn trundled the car in their wake. "They expect trouble?" he asked.

Joyce started from her glum thoughts. "They always expect trouble," she said. "I told you, didn't I, what a quarrelsome race this is – no wars, but so many bloody set-tos. However, their caution is just routine today. Obviously they're going to pitch camp with the other prides of their clan. A herd this size would require all the Gangu to control it."

"You said they was hunters, not herders."

"They are, most of the time. But you see, iziru and bambalo stampede when the sun flares, and many are so badly sunburned that they die. That must be because they haven't developed protection against ultraviolet since the atmosphere began to change. Big animals with long generations evolve more slowly than small ones, as a rule. The clans can't afford such losses. In a flare season like this, they keep close watch on the herds and force them into areas where there is some shade and where the undergrowth hinders panicky running."

Van Rijn's thumb jerked a scornful gesture at the lowering red disc. "You mean that ember ever puts out enough radiation to hurt a sick butterfly?"

"Not if the butterfly came from Earth. But you know what type M dwarfs are like. They flare, and when they do, it can increase their luminosity several hundred percent. These days on t'Kela, the oxygen content of the air has been lowered to a point where the ozone layer doesn't block out as much ultraviolet as it should. Then, too, a planet like this, with a metal-poor core, has a weak magnetic field. Some of the charged particles from the sun get through also, adding to an already high cosmic-ray background. It wouldn't bother you or me, but mankind evolved to withstand considerably more radiation than is the norm here."

"Ja, I see. Maybe also there not being much radioactive minerals locally has been a factor. On Throra, the flares don't bother them. They make festival then. But like you say, t'Kela is a harder luck world than Throra."

Joyce shivered. "This is a cruel cosmos. That's what we believe in on Esperance – fighting back against the universe, all beings together."

"Is a very nice philosophy, except that all beings is not built for it. You is a very sweet child, anyone ever tell you that?" Van Rijn laid an arm lightly across her shoulder. She found that she didn't mind greatly, with the gloom and the brewing star-storm outside.

In another hour they reached the camp site. Humpbacked leather tents had been erected around a flat field where there was an ammonia spring. Fires burned before the entrances, tended by the young. Females crouched over cooking pots, males swaggered about with hands on weapon hilts. The arrival of the car brought everyone to watch, not running, but strolling up with an elaborate pretense of indifference.

Or is it a pretense? Joyce wondered. She looked out at the crowd, a couple of hundred unhuman faces, eyes aglow, spearheads a-gleam, fur rumpled by the whimpering wind, but scarcely a sound from anyone. They've acted the same way, she thought, every clan and Horde, everywhere we encountered them: wild fascination at first, with our looks and our machines; then a lapse into this cool formal courtesy, as if we didn't make any real difference for good or ill. They've thanked us, not very warmly, for what favors we could do, and often insisted on making payment, but they've never invited us to their merrymakings or their rites, and sometimes the children throw rocks at us.

Nyaronga barked a command. His pride began pitching their own camp. Gradually the others drifted away.

Van Rijn glanced at the sun. "They sure it flares today?" he asked.

"Oh, yes. If the Ancients have said so, then it will," Joyce assured him. "It isn't hard to predict, if you have smoked glass and a primitive telescope to watch the star surface. The light is so dim that the spots and flare phenomena can easily be observed – unlike a type-G star – and the patterns are very characteristic. Any jackleg astronomer can predict a flare on an M class dwarf, days in advance. Heliograph signals carry the word from Kusulongo to the Hordes."

"I suppose the Old Fogies got inherited empirical knowledge from early times, like the Babylonians knew about planetary movements, ja... Whoops, speak of the devil, here we go!"

The sun was now not far above the western ridges, which stood black under its swollen disc. A thin curl of clearer red puffed slowly out of it on one side. The basai reared and screamed. A roar went through the clansfolk. Males grabbed the animals' bridles and dragged them to a standstill. Females snatched their pots and their young into the tents.

The flame expanded and brightened. Light crept along the shadowy hills and the plains beyond. The sky began to pale. The wind strengthened and threshed in the woods on the edge of camp.

The t'Kelans manhandled their terrified beasts into a long shelter of hides stretched over poles. One bolted. A warrior twirled his lariat, tossed, and brought the creature crashing to earth. Two others helped drag it under cover. Still the flame from the solar disc waxed and gathered luminosity, minute by minute. It was not yet too brilliant for human eyes to watch unprotected. Joyce saw how a spider web of forces formed and crawled there, drawn in fiery loops. A gout of radiance spurted, died, and was reborn. Though she had seen the spectacle before, she found herself clutching Van Rijn's arm. The merchant stuffed his pipe and blew stolid fumes.

Uulobu got down off the car. Joyce heard him ask Nyaronga, "May I help you face the angry Real One?"

"No," said the patriarch. "Get in a tent with the females."

Uulobu's teeth gleamed. The fur rose along his back. He unhooked the tomahawk at his waist.

"Don't!" Joyce cried through the intercom. "We are guests!"

For an instant the two t'Kelans glared at each other. Nyaronga's spear was aimed at Uulobu's throat. Then the Avongo sagged a little. "We are guests," he said in a choked voice. "Another time, Nyaronga, I shall talk about this with you."

"You – landless?" The leader checked himself. "Well, peace has been said between us, and there is no time now to unsay it. But we Gangu will defend our own herds and pastures. No help is needed."

Stiff-legged, Uulobu went into the nearest tent. Presently the last basai were gotten inside the shelter. Its flap was laced shut, to leave them in soothing darkness.

The flare swelled. It became a ragged sheet of fire next the sun disc, almost as big, pouring out as much light, but of an orange hue. Still it continued to grow, to brighten and yellow. The wind increased.

The heads of prides walked slowly to the center of camp. They formed a ring; the unwed youths made a larger circle around them. Nyaronga himself took forth a brass horn and winded it. Spears were raised aloft, swords and tomahawks shaken. The t'Kelans began to dance, faster and faster as the radiance heightened. Suddenly Nyaronga blew his horn again. A cloud of arrows whistled toward the sun.

"What they doing?" Van Rijn asked. "Exorcising the demon?"

"No," said Joyce. "They don't believe that's possible. They're defying him. They always challenge him to come down and 'fight.' And he's not a devil, by the way, but a god."

Van Rijn nodded. "It fits the pattern," he said, half to himself. "When a god steps out of his rightful job, you don't try to bribe him back, you threaten him. *Ja*, it fits."

The males ended their dance and walked with haughty slowness to their tents. The doorflaps were drawn. The camp lay deserted under the sun.

"Ha!" Van Rijn surged to his feet. "My gear!"

"What?" Joyce stared at him. She had grown so used to wan red light on this day's travel that the hue now pouring in the windows seemed ghastly on his cheeks.

"I want to go outside," Van Rijn told her. "Don't just stand there with tongue unreeled. Get me my suit!"

Joyce found herself obeying him. By the time his gross form was bedecked, the sun was atop the hills and had tripled its radiance. The flare was like a second star, not round but flame-shaped, and nearly white. Long shadows wavered across the world, which had taken on an unnatural brazen tinge. The wind blew dust and dead leaves over the ground, flattened the fires, and shivered the tents till they thundered.

"Now," Van Rijn said, "when I wave, you fix your intercom to full power so they can hear you. Then tell those so-called males to peek out at me if they have the guts." He glared at her. "And be unpolite about it, you understand me?"

Before she could reply he was in the air lock. A minute afterward he had cycled through and was stumping over the field until he stood in the middle of the encampment. Curtly, he signaled.

Joyce wet her lips – what did that idiot think he was doing? He'd never heard of this planet a month ago. He hadn't been on it a week. Practically all his information about it he had from her, during the past ten or fifteen hours. And he thought he knew how to conduct himself? Why, if he didn't get his fat belly full of whetted iron, it would only be because there was no justice in the universe. Did he think she'd let herself be dragged down with him?

Etched huge and black against the burning sky, Van Rijn jerked his arm again.

Joyce turned the intercom high and said in the vernacular, "Watch, all Gangu who are brave enough! Look upon the male from far places, who stands alone beneath the angered sun!"

Her tones boomed hollowly across the wind. Van Rijn might have nodded. She must squint now to see what he did. That was due to the contrast, not to the illumination *per se*. It was still only a few percent of what Earth gets. But the flare, with an effective temperature of a million degrees or better, was emitting in frequencies to which her eyes were sensitive. Ultraviolet also, she thought in a corner of her mind: too little to turn a human baby pink, but enough to bring pain or death to these poor dwellers in Hades.

Van Rijn drew his blaster. With great deliberation, he fired several bolts at the star. Their flash and noise seemed puny against the rage up there. Now what...?

"No!" Joyce screamed.

Van Rijn opened his faceplate. He made a show of it, sticking his countenance out of the helmet, into the full light. He danced grotesquely about and thumbed his craggy nose at heaven.

But...

The merchant finished with an unrepeatable gesture, closed his helmet again, fired off two more bolts, and stood with folded arms as the sun went under the horizon.

The flare lingered in view for a while, a sheet of ghostly radiance above the trees. Van Rijn walked back to the car through twilight. Joyce let him in. He opened his helmet, wheezing, weeping, and blaspheming in a dozen languages. Frost began to form on his suit.

"Hoo-ee!" he moaned. "And not even a little hundred cc. of whiskey to console my poor old mucky membranes!"

"You could have died," Joyce whispered.

"Oh, no. No. Not that way does Nicholas van Rijn die. At the age of a hundred and fifty, I plan to be shot by an outraged husband. The cold was not too bad, for the short few minutes I could hold my breath. But letting in that ammonia – terror and taxes!" He waddled to the bath cubicle and splashed his face with loud snortings.

The last flare-light sank. The sky remained hazy with aurora, so that only the brightest stars showed. The most penetrating charged particles from the flare would not arrive for hours; it was safe outside. One by one the t'Kelans emerged. Fires were poked up, sputtering and glaring in the dark.

Van Rijn came back. "Hokay, I'm set," he said. "Now put on your own suit and come out with me. We got to talk at them."

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As she walked into the circle around which stood the swart outlines of the tents, Joyce must push her way through females and young. Their ring closed behind her, and she saw fireglow reflected from their eyes and knew she was hemmed in. It was comforting to have Van Rijn's bulk so near and Uulobu's *pad-pad* at her back.

Thin comfort, though, when she looked at the males who waited by the ammonia spring. They had gathered as soon as they saw the humans coming. To her vision they were one shadow, like the night behind them. The fires on either side, that made it almost like day for a t'Kelan, hardly lit the front rank for her. Now and then a flame jumped high in the wind, or sparks went showering, or the dull glow on the smoke was thrown toward the group. Then she saw a barbed obsidian spearhead, a horn sword, an ax or an iron dagger, drawn. The forest soughed beyond the camp and she heard the frightened bawling of iziru as they blundered around in the dark. Her mouth went dry.

The fathers of the prides stood in the forefront. Most were fairly young; old age was not common in the desert. Nyaronga seemed to have primacy on that account. He stood, spear in hand, fangs showing in the half-open jaws, tendrils astir. His kilt fluttered in the unrestful air.

Van Rijn came to a halt before him. Joyce made herself stand close and meet Nyaronga's gaze. Uulobu crouched at her feet. A murmur like the sigh before a storm went through the warriors.

But the Earthman waited imperturbable, until at last Nyaronga must break the silence. "Why did you challenge the sun? No sky-one has ever done so before."

Joyce translated, a hurried mumble. Van Rijn puffed himself up visibly, even in his suit. "Tell him," he said, "I came just a short time ago. Tell him the rest of you did not think it was worth your whiles to make defiance, but I did."

"What do you intend to do?" she begged. "A misstep could get us killed."

"True. But if we don't make any steps, we get killed for sure, or starve to death because we don't dare come in radio range of where the rescue ship will be. Not so?" He patted her hand. "Damn these gloves! This would be more fun without. But in all kinds of cases, you trust me, Joyce. Nicholas Van Rijn has not got old and fat on a hundred rough planets, if he was not smart enough to outlive everybody else. Right? Exact. So tell whatever I say to them, and use a sharp tone. Not unforgivable insults, but be snotty, hokay?"

She gulped. "Yes. I don't know why, b-but I will let you take the lead. If..." She suppressed fear and turned to the waiting t'Kelans. "This sky-male with me is not one of my own party," she told them. "He is of my race, but from a more powerful people among them than my people. He wishes me to tell you that though we sky-folk have hitherto not deigned to challenge the sun, he has not thought it was beneath him to do so."

"You never deigned?" rapped someone. "What do you mean by that?"

Joyce improvised. "The brightening of the sun is no menace to our people. We have often said as much. Were none of you here ever among those who asked us?"

Stillness fell again for a moment, until a scarred one-eyed patriarch said grudgingly, "Thus I heard last year, when you – or one like you – were in my pride's country healing sick cubs."

"Well, now you have seen it is true," Joyce replied.

Van Rijn tugged her sleeve. "Hoy, what goes on? Let me talk or else our last chance gets stupidized away."

She dared not let herself be angered, but recounted the exchange. He astonished her by answering, "I am sorry, little girl. You was doing just wonderful. Now, though, I have a speech to make. You translate as I finish every sentence, ha?"

He leaned forward and stabbed his index finger just beneath Nyaronga's nose, again and again, as he said harshly, "You ask why I went out under the brightening sun? It was to show you I am not afraid of the fire it makes. I spit on

your sun and it sizzles. Maybe it goes out. My sun could eat yours for breakfast and want an encore, by damn! Your little clot hardly gives enough light to see by, not enough to make bogeyman for a baby in my people."

The t'Kelans snarled and edged closer, hefting their weapons. Nyaronga retorted indignantly, "Yes, we have often observed that you sky-folk are nearly blind."

"You ever stood in the light from our cars? You go blind then, *nie*? You could not stand Earth, you. Pop and sputter you'd go, up in a little greasy cloud of smoke."

They were taken aback at that. Nyaronga spat and said, "You must even bundle yourselves against the air."

"You saw me stick my head out in the open. You care to try a whiff of my air for a change? I dare you."

A rumble went through the warriors, half wrath and half unease. Van Rijn chopped contemptuously with one hand. "See? You is more weakling than us."

A big young chieftain stepped forward. His whiskers bristled. "I dare."

"Hokay, I give you a smell." Van Rijn turned to Joyce. "Help me with this bebloodied air unit. I don't want no more of that beetle venom they call air in my helmet."

"But... but..." Helplessly, she obeyed, unscrewing the flush valve on the recycler unit between his shoulders. "Blow it in his face," Van Rijn commanded.

The warrior stood bowstring taut. Joyce thought of the pain he must endure. She couldn't aim the hose at him.

"Move!" Van Rijn barked. She did. Terrestrial atmosphere gushed forth.

The warrior yowled and stumbled back. He rubbed his nose and streaming eyes. For a minute he wobbled around, before he collapsed into the arms of a follower. Joyce refitted the valve as Van Rijn chortled, "I knew it. Too hot, too much oxygen, and especial the water vapor. It makes Throrans sick, so I thought sure it would do the same for these chaps. Tell them he will get well in a little while."

Joyce gave the reassurance. Nyaronga shook himself and said, "I have heard tales about this. Why must you show that poor fool what was known, that you breathe poison?"

"To prove we is just as tough as you, only more so, in a different way," Van Rijn answered through Joyce. "We can whip you to your kennels like small dogs if we choose."

That remark brought a yell. Sharpened stone flashed aloft. Nyaronga raised his arms for silence. It came, in a mutter and a grumble and a deep sigh out of the females watching from darkness. The old chief said with bleak pride, "We know you command weapons we do not. This means you have arts we lack, which has never been denied. It does not mean you are stronger. A t'Kelan is not stronger than a bambalo simply because he has a bow to kill it from afar. We are a hunter folk, and you are not, whatever your weapons."

"Tell him," Van Rijn said, "that I will fight their most powerful man barehanded. Since I must wear this suit that protects from his bite, he can use armaments. They will go through fabricord, so it is fair, *nie*?"

"He'll kill you," Joyce protested.

Van Rijn leered. "If so, I die for the most beautifullest lady on this planet." His voice dropped. "Maybe then you is sorry you was not more kind to a nice old man when you could be."

"I won't!"

"You will, by damn!" He seized her wrist so strongly that she winced. "I know what I am making, you got me?"

Numbly, she conveyed the challenge. Van Rijn drew his blaster and threw it at Nyaronga's feet. "If I lose, the winner can keep this," he said.

That fetched them. A dozen wild young males leaped forth, shouting, into the firelight. Nyaronga roared and cuffed them into order. He glared from one to another and jerked his spear at an individual. "This is my own son Kusalu. Let him defend the honor of pride and clan!"

The t'Kelan was overtopped by Van Rijn, but was almost as broad. Muscles moved snakishly under his fur. His fangs glistened as he slid forward, tomahawk in right hand, iron dagger in left. The other males fanned out, making a wide circle of eyes and poised weapons. Uulobu drew Joyce aside. His grasp trembled on her arm. "Could I but fight him myself," he whispered.

While Kusalu glided about, Van Rijn turned, ponderous as a planet. His arms hung apelike from hunched shoulders. The fires tinged his crude features where they jutted within the helmet. "Nya-a-ah," he said.

Kusalu cursed and threw the tomahawk with splintering force. Van Rijn's left hand moved at an impossible speed. He caught the weapon in mid air and threw himself backward. The thong tautened. Kusalu went forward on his face. Van Rijn plunged to the attack.

Kusalu rolled over and bounced to his feet in time. His blade flashed. Van Rijn blocked it with his right wrist. The Earthman's left hand took a hitch in the thong and yanked again. Kusalu went to one knee. Van Rijn twisted that arm around behind his back. Every t'Kelan screamed.

Kusalu slashed the thong across. Spitting, he leaped erect again and pounced. Van Rijn gave him an expert kick in the belly, withdrawing the foot before it could be seized. Kusalu lurched. Van Rijn closed in with a karate chop to the side of the neck.

Kusalu staggered but remained up. Van Rijn barely ducked the rip of the knife. He retreated. Kusalu stood a moment, regaining his wind. Then he moved in one blur.

Things happened. Kusalu was grabbed as he charged and sent flailing over Van Rijn's shoulder. He hit ground with a thump. Van Rijn waited. Kusalu still had the dagger. He rose and stalked near. Blood ran from his nostril.

"*La ci darem la mano*," sang Van Rijn. As Kusalu prepared to smite, the Earthman got a grip on his right arm, whirled him around, and pinned him.

Kusalu squalled. Van Rijn ground a knee in his back. "You say, 'Uncle?'" he panted.

"He'll die first," Joyce wailed.

"Hokay, we do it hard fashion." Van Rijn forced the knife loose and kicked it aside. He let Kusalu go. But the t'Kelans had scarcely raised himself when a gauntleted fist smashed into his stomach. He reeled. Van Rijn pushed in relentlessly, blow after blow, until the warrior sank.

The merchant stood aside. Joyce stared at him with horror. "Is all in order," he calmed her. "I did not damage him permanent."

Nyaronga helped his son climb back up. Two others led Kusalu away. A low keening went among the massed t'Kelans. It was like nothing Joyce had ever heard before.

Van Rijn and Nyaronga confronted each other. The native said very slowly, "You have proven yourself, Sky-male. For a landless one, you fight well, and it was good of you not to slay him."

Joyce translated between sobs. Van Rijn answered, "Say I did not kill that young buck because there is no need. Then say I have plenty territory of my own." He pointed upward, where stars glistened in the windy, hazy sky. "Tell him there is my hunting grounds, by damn. "

When he had digested this, Nyaronga asked almost plaintively, "But what does he wish in our land? What is his gain?"

"We came to help..." Joyce stopped herself and put the question to Van Rijn.

"Ha!" the Earthman gloated. "Now we talk about turkeys." He squatted near a fire. The pride fathers joined him; their sons pressed close to listen. Uulobu breathed happily, "We are taken as friends."

"I do not come to rob your land or game," Van Rijn said in an oleaginous tone. "No, only to make deals, with good profit on both sides. Surely these folks trade with each other. They could not have so much stuffs as they do otherwise."

"Oh, yes, of course." Joyce settled weakly beside him. "And their relationship to the city is essentially *quid pro quo*, as I told you before."

"Then they will understand bargains being struck. So tell them those Gaffers on the mountain has got jealous of us. Tell them they sicced the Shanga onto our camp. The whole truths, not varnished more than needful."

"What? But I thought... I mean, didn't you want to give them the impression that we're actually powerful? Should we admit we're refugees?"

"Well, say we has had to make a... what do the military communiques say when you has of your pants beaten off?... an orderly rearward advance for strategic reasons, to previously prepared positions."

Joyce did. Tendrils rose on the natives' heads, pupils narrowed, and hands raised weapons anew. Nyaronga asked dubiously. "Do you wish shelter among us?"

"No," said Van Rijn. "Tell him we is come to warn them, because if they get wiped out we can make no nice deals with profit. Tell them the Shanga now has your guns from the dome, and will move with their fellow clans into Rokulela territory."

Joyce wondered if she had heard aright. "But we don't... we didn't... we brought no weapons except a few personal sidearms. And everybody must have taken his own away with him in the retreat."

"Do they know that, these peoples?"

"Why... well... would they believe you?"

"My good pretty blonde with curves in all the right places, I give you Nicholas van Rijn's promise they would not believe anything else."

Haltingly, she spoke the lie. The reaction was horrible. They boiled throughout the camp, leaped about, brandished their spears, and ululated like wolves. Nyaronga alone sat still, but his fur stood on end.

"Is this indeed so?" he demanded. It came as a whisper through the noise.

"Why else would the Shanga attack us, with help from the Ancients?" Van Rijn countered.

"You know very well why," Joyce said. "The Ancients bribed them, played on their superstitions, and probably offered them our metal to make knives from."

"*Ja*, no doubt, but you give this old devil here my rhetorical just the way I said it. Ask him does it not make sense, that the Shanga would act for the sake of blasters and slugthrowers, once the Geezers put them up to it and supplied gunpowder? Then tell him this means the Graybeards must be on the side of the Shanga's own Horde... what's they called, now?"

"The Yagola."

"So. Tell him that things you overheard give you good reason to believe the Shanga clan will put themselves at the head of the Yagola to move west and push the Rokulela out of this fine country."

Nyaronga and the others, who fell into an ominous quiet as Joyce spoke, had no trouble grasping the concept. As she had told Van Rijn, war was not a t'Kelans institution. But she was not conveying the idea of a full-dress war – rather, a *Völkerwanderung* into new hunting grounds. And such things were frequent enough on this dying planet. When a region turned utterly barren, its inhabitants must displace someone else, or die in the attempt.

The difference now was that the Yagola were not starved out of their homes. They were alleged to be anticipating that eventuality, plotting to grab off more land with their stolen firearms to give them absolute superiority.

"I had not thought them such monsters," Nyaronga said.

"They aren't," Joyce protested in Anglic to Van Rijn. "You're maligning them so horribly that... that..."

"Well, well, all's fair in love and propaganda," he said. "Propose to Nyaronga that we all return to Kusulonga, collecting reinforcements as we go, to see for ourselves if this business really is true and use numerical advantage while we have still got it."

"You are going to set them at each other's throats! I won't be party to any such thing. I'd die first..."

"Look, sweet potato, nobody has got killed yet. Maybe nobody has to be. I can explain later. But for now, we have got to strike while the fat is in the fire. They is wonderful excited. Don't give them a chance to cool off till they has positive decided to march." The man laid a hand on his heart. "You think old, short of breath, comfort-loving, cowardly Nicholas van Rijn wants to fight a war? You think again. A form-fitting chair, a tall cool drink, a Venusian cigar, *Eine Kleine Nachtmusik* on the taper, aboard his ketch while he sails with a bunch of dancing girls down Sunda Straits, that is only which he wants. Is that much to ask? Be like your own kind, gentle selfs, and help me stir them up to fight."

Trapped in her own bewilderment, she followed his lead. That same night, riders went out bearing messages to such other Rokulela clans as were known to be within reach.

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The first progress eastward was in darkness, to avoid the still flaring sun. Almost every male, grown or half-grown, rode along, leaving females and young behind in camp. They wore flowing robes and burnooses, their basai were blanketed, against the fierce itch that attacked exposed t'Kelans skin during such periods. Most of the charged particles from the star struck the planet's day side, but there was enough magnetic field to bring some around to the opposite hemisphere. Even so, the party made surprisingly good speed. Peering from the car windows, Joyce glimpsed them under the two moons, shadowy shapeless forms that slipped over the harsh terrain, an occasional flash of spearheads. Through the engine's low voice she heard them calling to each other, and the deep earth-mutter of unshod hoofs.

"You see," Van Rijn lectured, "I am not on this world long, but I been on a lot of others, and read reports about many more. In my line of business this is needful. They always make parallels. I got enough clues about these t'Kelans to guess the basic pattern of their minds, from analogizings. You Esperancers, on this other hand, has not had so much experience. Like most colonies, you is too isolated from the galactic mainstream to keep *au courant* with things, like for instance the modern explorer techniques. That was obvious from the fact you did not make depth psychology studies the very first thing, but instead took what you found at face valuation. Never do that, Joyce. Always bite the coin that feeds you, for this is a hard and wicked universe."

"You seem to know what you're about, Nick," she admitted.

He beamed and raised her hand to his lips. She made some confused noise about heating coffee and retreated. She didn't want to hurt his feelings; he really was an old dear, under that crust of his.

When she came back to the front seat, placing herself out of his reach, she said, "Well, tell me, what pattern did you deduce? How do their minds work?"

"You assumed they was like warlike human primitives, in early days on Earth," he said. "On the topside, that worked hokay. They is intelligent, with language; they can reason and talk with you; this made them seem easy understood. What you forgot, I think, me, was conscious intelligence is only a small part of the whole selfness. All it does is help us get what we want. But the wanting itself – food, shelter, sex, everything – our motives – they come from deeper down. There is no logical reason even to stay alive. But instinct says to, so we want to. And instinct comes from very old evolution. We was animals long before we became thinkers and, uh –" Van Rijn's beady eyes rolled piously ceilingward –" and was given souls. You got to think how a race evolved before you can take them... I mean understand them."

"Now humans, the experts tell me, got started way back when, as ground apes that turned carnivore when the forests shrank up in Africa for lots of megayears. This is when they started to walking erect the whole time, and grew hands fully developed to make weapons because they had not claws and teeth like lions. Hokay, so we is a mean lot, we Homo Sapienses, with killer instincts. But not exclusive. We is still omnivores who can even survive on Brussels sprouts if we got to. Pfu! But we can. Our ancestors been peaceful nutpluckers and living off each other's fleas a long, longer time than they was hunters. It shows."

"The t'Kelans, on the other side, has been carnivores since they was still four-footers. Not very good carnivores. Unspecialized, with no claws and pretty weak biting apparatus even if it is stronger than humans'. That is why they also developed hands and made tools, which led to them getting big brains. Nevertheless, they have no vegetarian whatsolutely in their ancestors, as we do. And they have much powerfuller killing instincts than us. And is not so gregarious. Carnivores can't be. You get a big concentration of hunters in one spot, and by damn, the game goes away. Is that coffee ready?"

"I think so." Joyce fetched it. Van Rijn slurped it down, disregarding a temperature that would have taken the skirt off her palate, steering with one bare splay foot as he drank.

"I begin to see," she said with growing excitement. "That's why they never developed true nations or fought real wars. Big organizations are completely artificial things to them, commanding no loyalty. You don't fight or die for a Horde, any more than a human would fight for... for his bridge club."

"Um-m-m, I have known some mighty bloodshot looks across bridge tables. But *ja*, you get the idea. The pride is a natural thing here, like the human family. The clan, with blood ties, is only one step removed. It can excite t'Kelans as much, maybe, as his country can excite a man. But Hordes? *Nie*. An arrangement of convenience only.

"Not that pride and clan is loving-kindness and sugar candy. Humans make family squabbles and civil wars. T'Kelans have still stronger fighting instincts than us. Lots of arguments and bloodshed. But only on a small scale, and not taken too serious. You said to me, is no vendettas here. That means somebody killing somebody else is not thought to have done anything bad. In fact, whoever does not fight – male, anyhow – strikes them as unnatural, like less than normal."

"Is... that why they never warmed up to us? To the Esperancian mission, I mean?"

"Partly. Not that you was expected to fight at any specific time. Nobody went out to pick a quarrel when you gave no offense and was even useful. But your behavior taken in one lump added up to a thing they couldn't understand. They figured there was something wrong with you, and felt a goodly natured contempt. I had to prove I was tough as they or tougher. That satisfied their instincts, which then went to sleep and let them listen to me with respects."

Van Rijn put down his empty cup and took out his pipe.

"Another thing you lacked was territory," he said. "Animals on Earth, too, has an instinct to stake out and defend a piece of ground for themselves. Humans do. But for carnivores this instinct has got to be very, very, very powerful, because if they get driven away from where the game is, they can't survive on roots and berries. They die.

"You saw yourself how those natives what could not maintain a place in their ancestral hunting grounds but went to you instead was looked downwards on. You Esperancers only had a dome on some worthless nibble of land. Then you went around preaching how you had no designs on anybody's country. Ha! They had to believe you was either lying – maybe that is one reason the Shanga attacked you – or else was abnormal weaklings."

"But couldn't they understand?" Joyce asked. "Did they expect us, who didn't even look like them, to think the same way as they do?"

"Sophisticated, civilized t'Kelans could have caught the idea," Van Rijn said. "However, you was dealing with naïve barbarians."

"Except the Ancients. I'm sure they realize..."

"Maybe so. Quite possible. But you made a deadly threat to them. Could you not see? They has been the scribes, doctors, high-grade artisans, sun experts, for ages and ages. You come in and start doing the same as them, only much better. What you expect them to do? Kiss your foots? Kiss any part of your anatomy? Not them! They is carnivores, too. They fight back."

"But we never meant to displace them!"

"Remember," Van Rijn said, wagging his pipe stem at her, "reason is just the lackey for instinct. The Gaffers is more subtle than anybody elses. They can sit still in one place, between walls. They do not hunt. They do not claim thousands of square kilometers for themselves. But does this mean they have no instinct of territoriality? Ha! Not bloody likely! They has only sublimed it. Their work, that is their territory – and you moved in on it."

Joyce sat numbly, staring out into night. Time passed before she could protest. "But we explained to them – I'm sure they understood – we explained this planet will die without our help."

"*Ja, ja*. But a naturally born fighter has less fear of death than other kinds animals. Besides, the death was scheduled for a thousand years from now, did you not say? That is too long a time to feel with emotions. Your own threat to them was real, here and now."

Van Rijn lit his pipe. "Also," he continued around the mouthpiece, "your gabbing about planet-wide cooperation had not sit so well. I doubt they could really comprehend it. Carnivores don't make cooperations except on the most teensy scale. It isn't practical for them. They haven't got such instincts. The Hordes – which, remember, is not nations in any sense – they could never get what you was talking about, I bet. Altruism is outside their mental horizontals. It only made them suspicious of you. The Ancients maybe had some vague notion of your motives, but didn't share them in the littlest. You can't organize these peoples. Sooner will you build a carousel on Saturn's rings. It does not let itself be done."

"You've organized them to fight!" she exclaimed in her anguish.

"No. Only given them a common purpose for this time being. They believed what I said about weapons left in the dome. With minds like that, they find it much the easiest thing to believe. Of course you had an arsenal – everybody does. Of course you would have used it if you got the chance – anybody would. Ergo, you never got the chance; the Shanga captured it too fast. The rest of the story, the Yagola plot against the Rokulela, is at least logical enough to their minds that they had better investigate it good."

"But what are you going to make them do?" She couldn't hold back the tears any longer. "Storm the mountain? They can't get along without the Ancients."

"Sure, they can, if humans substitute."

"B-b-but-but-no, we can't, we mustn't..."

"Maybe we don't have to," Van Rijn said. "I got to play by my ear of tinned cauliflower when we arrive. We will see." He laid his pipe aside. "There, there, now, don't be so sad. But go ahead and cry if you want. Papa Nicky will dry your eyes and blow your nose." He offered her the curve of his arm. She crept into it, buried her face against his side, and wept herself to sleep.

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Kusulongo the Mountain rose monstrous from the plain, cliff upon gloomy cliff, with talus slopes and glaciers between, until the spires carved from its top stood ragged across the sun-disc. Joyce had seldom felt the cold and murk of this world as she did now, riding up the path to the city on a horned animal that must be blanketed against the human warmth of her suit. The wind went shrieking through the empty dark sky, around the crags, to buffet her like fists and snap the banner which Uulobu carried on a lance as he rode ahead. Glancing back, down a dizzying sweep of stone, she saw Nyaronga and the half-dozen other chiefs who had been allowed to come with the party. Their cloaks streamed about them; spears rose and fell with the gait of their mounts; the color of their fur was lost in this dreary light, but she thought she made out the grimness on their faces. Immensely far below, at the mountain's foot, lay their followers, five hundred armed and angry Rokulela. But they were hidden by dusk, and if she died on the heights they could give her no more than a vengeance she didn't want.

She shuddered and edged her basai close to the one which puffed and groaned beneath Van Rijn's weight. Their knees touched. "At least we have some company," she said, knowing the remark was moronic but driven to say anything that might drown out the wind. "Thank God the flare died away so fast."

"*Ja*, we made good time," the merchant said. "Only three days from the Lubambaru to here, that's quicker than I forewaited. And lots of allies picked up."

She harked back wistfully to the trek. Van Rijn had spent the time being amusing, and had succeeded better than she would have expected. But then they arrived, and the Shanga scrambled up the mountain one jump ahead of the Rokulela charge; the attackers withdrew, unwilling to face cannon if there was a chance of avoiding it; a parley was agreed on; and she couldn't imagine how it might end other than in blood. The Ancients might let her group go down again unhurt, as they'd promised – or might not – but, however that went, before sundown many warriors would lie broken for the carrion fowl. Oh, yes, she admitted to herself, I'm also afraid of what will happen to me, if I should get back alive to Esperance. Instigating combat! Ten years' corrective detention if I'm lucky... unless I run away with Nick and never see home again, never, never... But to make those glad young hunters die!

She jerked her reins, half minded to flee down the trail and into the desert. The beast skittered under her. Van Rijn caught her by the shoulder, "Calm, there, if you please," he growled. "We has got to outbluff them upstairs. They will be a Satan's lot harder to diddle than the barbarians was."

"Can we?" she pleaded. "They can defend every approach. They're stocked for a long siege, I'm certain, longer than... than we could maintain."

"If we bottle them for a month, is enough. For then comes the League ship."

"But they can send for help, too. Use the heliographs." She pointed to one of the skeletal towers above. Its mirror shimmered dully in the red luminance. Only a t'Kelán could see the others, spaced out in several directions across the plains and hills. "Or messengers can slip between our lines – we'd be spread so terribly thin – they could raise the whole Yagola Horde against us."

"Maybe so, maybe not. We see. Now peep down and let me think."

They jogged on in silence, except for the wind. After an hour they came to a wall built across the trail. Impassable slopes of detritus stretched on either side. The archway held two primitive cannons. Four members of the city garrison poised there, torches flickering near the fuses. Guards in leather helmets and corselets, armed with bows and pikes, stood atop the wall. The iron gleamed through the shadows.

Uulobu rode forth, cocky in the respect he had newly won from the clans. "Let pass the mighty sky-folk who have condescended to speak with your patriarchs," he demanded.

"Hmpf!" snorted the captain of the post. "When have the sky-folk ever had the spirit of a gutted yangulu?"

"They have always had the spirit of a makovolo in a rage," Uulobu said. He ran a thumb along the edge of his dagger. "If you wish proof, consider who dared cage the Ancients on their own mountain."

The warrior made a flustered noise, collected himself, and stated loudly, "You may pass then, and be safe as long as the peace between us is not unsaid."

"No more fiddlydoodles there," Van Rijn rapped. "We want by, or we take your popguns and stuff them in a place they do not usually go." Joyce forebore to interpret. Nick had so many good qualities; if only he could overcome that vulgarity! But he had had a hard life, poor thing. No one had ever really taken him in hand... Van Rijn rode straight between the cannon and on up the path.

It debouched on a broad terrace before the city wall. Other guns frowned from the approaches. Two score warriors paced their rounds with more discipline than was known in the Hordes. Joyce's eyes went to the three shapes in the portal. They wore plain white robes, and their fur was grizzled with age. But their gaze was arrogant on the newcomers.

She hesitated. "I... this is the chief scribe..." she began.

"No introduction to secretaries and office boys," Van Rijn said. "We go straight to the boss."

Joyce moistened her lips and told them: "The head of the sky-folk demands immediate parley."

"So be it," said one Ancient without tone. "But you must leave your arms here."

Nyaronga bared his teeth. "There is no help for it," Joyce reminded him. "You know as well as I, by the law of the fathers, none but Ancients and warriors born in the city may go through this gate with weapons." Her own holster and Van Rijn's were already empty.

She could almost see the heart sink in the Rokulela, and remembered what the Earthman had said about instinct. Disarming a t'Kelán was a symbolic emasculation. They put a bold face on it, clattering their implements down and dismounting to stride with stiff backs at Van Rijn's heels. But she noticed how their eyes flickered about, like those of trapped animals, when they passed the gateway.

Kusulongo the City rose in square tiers, black and massive under the watchtowers. The streets were narrow guts twisting between, full of wind and the noise of hammering from the metalsmiths' quarters. Dwellers by birthright stood aside as the barbarians passed, drawing their robes about them as if to avoid contact. The three councillors said no word; stillness fell everywhere as they walked deeper into the citadel, until Joyce wanted to scream.

At the middle of the city stood a block full twenty meters high, windowless, only the door and the ventholes opening to air. Guards hoisted their swords and hissed in salute as the hierarchs went through the entrance. Joyce heard a small groan at her back. The Rokulela followed the humans inside, down a winding hall, but she didn't think they would be of much use. The torchlit cave at the end was cleverly designed to sap a hunter's nerve.

Six white-robed oldsters were seated on a semicircular dais. The wall behind them carried a mosaic, vivid even in this fluttering dimness, of the sun as it flared. Nyaronga's breath sucked between his teeth. He had just been reminded of the Ancients' power. True, Joyce told herself, he knew the humans could take over the same functions. But immemorial habit is not easily broken.

Their guides sat down too. The newcomers remained standing. Silence thickened. Joyce swallowed several times and said, "I speak for Nicholas van Rijn, patriarch of the sky-folk, who has leagued himself with the Rokulela clans. We come to demand justice."

"Here there is justice," the gaunt male at the center of the dais replied. "I, Oluba's son Akulo, Ancient-born, chief in council, speak for Kusulongo the City. Why have you borne a spear against us?"

"Ha!" snorted Van Rijn when it had been conveyed to him. "Ask that old hippopotamus why he started these troubles in the first place."

"You mean hypocrite," Joyce said automatically.

"I mean what I mean. Come on, now. I know very well why he has, but let us hear what ways he covers up."

Joyce put the question. Akulo curled his tendrils, a gesture of skepticism, and murmured, "This is strange. Never have the Ancients taken part in quarrels below the mountains. When you attacked the Shanga, we gave them refuge, but such is old custom. We will gladly hear your dispute with them and arrange a fair settlement, but this is no fight of ours."

Joyce anticipated Van Rijn by snapping in an upsurge of indignation. "They blew down our walls. Who could have supplied them the means but yourselves?"

"Ah, yes." Akulo stroked his whiskers. "I understand your thinking, sky-female. It is very natural. Well, as this council intended to explain should other carriers of your people arrive here and accuse us, we do sell fireworks for magic and celebration. The Shanga bought a large quantity from us. We did not ask why. No rule controls how much may be bought at a time. They must have emptied the powder out themselves, to use against you."

"What's he say?" Van Rijn demanded.

Joyce explained. Nyaronga muttered – it took courage with the Ancients listening. "No doubt the Shanga pride-fathers will support that tale. An untruth is a low price for weapons like yours."

"What weapons speak you of?" a councillor interrupted.

"The arsenal the sky-folk had, which the Shanga captured for use against my own Horde," Nyaronga spat. His mouth curled upward. "So much for the disinterestedness of the Ancients."

"But... No!" Akulo leaned forward, his voice not quite as smooth as before. "It is true that Kusulongo the City did nothing to discourage an assault on the sky-ones' camp. They are weak and bloodless – legitimate prey. More, they were causing unrest among the clans, undermining the ways of the fathers..."

"Ways off which Kusulongo the City grew fat," Joyce put in.

Akulo scowled at her but continued addressing Nyaronga. "By their attack, the Shanga did win a rich plunder of metal. They will have many good knives. But that is not enough addition to their power that they could ever invade new lands when desperation does not lash them. We thought of that too, here on the mountain, and did not wish to see it happen. The concern of the Ancients was ever to preserve a fitting balance of things. If the sky-folk went away, that balance would actually be restored which they endangered. A little extra metal in Yagola hands would not upset it anew. The sky-folk were never seen to carry any but a few hand-weapons. Those they took with them when they fled. There never was an armory in the dome for the Shanga to seize. Your fear was for nothing, you Rokulela."

Joyce had been translating for Van Rijn *sotto voce*. He nodded. "Hokay. Now tell them what I said you should."

I've gone too far to retreat, she realized desolately. "But we *did* have weapons in reserve!" she blurted. "Many of them, hundreds, whole boxes full, that we did not get a chance to use before the attack drove us outside."

Silence cracked down. The councillors stared at her in horror. Torch flames jumped and shadows chased each other across the walls. The Rokulela chiefs watched with a stern satisfaction that put some self-confidence back into them.

Finally Akulo stuttered, "B-b-but you said... I asked you once myself, and you denied having... having more than a few..."

"Naturally," Joyce said, "we kept our main strength in reserve, unrevealed."

"The Shanga reported nothing of this sort."

"Would you expect them to?" Joyce let that sink in before she went on. "Nor will you find the cache if you search the oasis. They did not resist our assault with fire, so the guns cannot have been in this neighborhood. Most likely someone took them away at once into the Yagola lands, to be distributed later."

"We shall see about this." Another Ancient clipped off the words. "Guard!" A sentry came in through the doorway to the entry tunnel. "Fetch the spokesman of our clan guests."

Joyce brought Van Rijn up to date while they waited.

"Goes well so far," the merchant said. "But next comes the ticklish part, not so much fun as tickling you."

"Really!" She drew herself up, hot in the face. "You're impossible."

"No, just improbable... Ah, here we go already."

A lean t'Kelan in Shanga garb trod into the room. He folded his arms and glowered at the Rokulela. "This is Batuzi's son Masotu," Akulo introduced. He leaned forward, tense as his colleagues. "The sky-folk have said you took many terrible weapons from their camp. Is that truth?"

Masotu started. "Certainly not! There was nothing but that one emptied handgun I showed you when you came down at dawn."

"So the Ancients were indeed in league with the Shanga," rasped a t'Kelan in Van Rijn's party.

Briefly disconcerted, Akulo collected himself and said in a steel tone, "Very well. Why should we deny it, after all? Kusulongo the City seeks the good of the whole world, which is its own good; and these sly strangers were bringing new ways that rotted old usage. Were they not softening you for the invasion of their own people? What other reason had they to travel about in your lands? What other reason could they have? Yes, this council urged the Shanga to wipe them out as they deserve."

Though her heartbeat nearly drowned her words, Joyce managed to interpret for Van Rijn. The merchant's lips thinned. "Now they confess it to our facing," he said. "Yet they have got to have some story ready to fob off Earthships and make humans never want to come here again. They do not intend to let us go down this hill alive, I see, and talk contradictions afterwards." But he gave her no word for the natives.

Akulo pointed at Masotu. "Do you tell us, then, that the sky-folk have lied and you found no arsenal?"

"Yes." The Shanga traded stares with Nyaronga. "Ah, your folk fretted lest we use that power to overrun your grasslands," he deduced shrewdly. "There was no need to fear. Go back in peace and let us finish dealing with the aliens."

"We never feared," Nyaronga corrected. Nonetheless his glance toward the humans was doubtful.

An Ancient stirred impatiently on the dais. "Enough of this," he said. "Now we have all seen still another case of the sky-fold brewing trouble. Call in the guards to slay them. Let peace be said between Shanga and all Rokulela. Send everyone home and have done."

Joyce finished her running translation as Akulo opened his mouth. "Botulism and bureaucrats!" Van Rijn exploded. "Not this fast, little chum." He reached under the recycler tank on his back and pulled out his blaster. "Please to keep still."

No t'Kelan stirred, though a hiss went among them. Van Rijn backed toward the wall so he could cover the doorway as well. "Now we talk more friendly," he smiled.

"The law has been broken," Akulo sputtered.

"Likewise the truce which you said between us," Joyce answered, though no culture on this planet regarded oathbreaking as anything but a peccadillo. She felt near fainting with relief. Not that the blaster solved many problems. It wouldn't get them out of a city aswarm with archers and spear-casters. But...

"Quiet!" boomed Van Rijn. Echoes rang from wall to stony wall. A couple of sentries darted in. They pulled up short when they saw the gun.

"Come on, join the party," the Earthman invited. "Lots of room and energy charges for everybody."

To Joyce he said, "Hokay, now is where we find out whether we have brains enough to get out of being heroes. Tell them that Nicholas Van Rijn has a speech to make, then talk for me as I go along."

Weakly, she relayed the message. The least relaxation showed on the tigery bodies before her. Akulo, Nyaronga, and Masotu nodded together. "Let him be heard," the Ancient said. "There is always time to fight afterward."

"Good." Van Rijn's giant form took a step forward. He swept the blaster muzzle around in an oratorical gesture. "First, you should know I caused all this hullabaloo mainly so we could talk. If I come back here alone, you would have clobbered me with pointy little rocks, and that would not be so good for any of us. Ergo, I had to come in company. Let Nyaronga tell you I can fight like a hungry creditor if needful. But maybe there is no need this time, *nie?*"

Joyce passed on his words, sentence by sentence, and waited while the Gangu pride-father confirmed that humans were tough customers. Van Rijn took advantage of the general surprise to launch a quick verbal offensive.

"We have got this situation. Suppose the Shanga are lying and have really copped a modern arsenal. Then they can gain such power that even this city becomes a client of theirs instead of being *primus inter pares* like before. *Nie?* To prevent this, a common cause is needful between Ancients, Rokulela, and us humans who can get bigger weapons to stop the Yagola when our rescue ship comes in."

"But we have no such booty," Masotu insisted.

"So you say," Joyce replied. She was beginning to get Van Rijn's general idea. "Ancients and Rokulela, dare you take his word on so weighty a matter?"

As indecision waxed on the dais, Van Rijn continued. "Now let us on the other hands suppose I am the liar and there never was any loose zappers in the dome. Then Shanga and Ancients must keep on working together. For my people's ship that will come from our own territory, which is the whole skyful of stars, they must be told some yarn about why their dome was destroyed. Everybody but me and this cute doll here got safe away, so it will be known the Shanga did the job. Our folks will be angry at losing such a good chance for profit they have been working on for a long time. They will blame the Ancients as using Shanga for pussyfoots, and maybe blow this whole mountain to smithereens, unless a good story that Shanga corroborate in every way has been cooked beforehand to clear the Ancients. Right? *Ja*. Well, then, for years to come, the Shanga – through them, all Yagola – must be in close touch with Kusulongo town. And they will not take the blame for no payment at all, will they? So hokay, you Rokulela, how impartial you think the Ancients will be to you? How impartial can the Ancients be, when the Shanga can blackmail them? You need humans here to make a balance."

Uulobu clashed his teeth together and cried, "This is true!" But Joyce watched Nyaronga. The chief pondered a long while, trading looks with his colleagues, before he said, "Yes, this may well be. At least, one does not wish to risk being cheated, when disputes come here for judgment. Also, the bad years may come to Yagoland next, when they must move elsewhere... and a single failure to predict a flare for us could weaken our whole country for invasion."

Stillness stretched. Joyce's phone pickup sent her only the sputter of torches and the boom of wind beyond the doorway. Akulo stared down Van Rijn's gun muzzle, without a move. At last he said, "You sow discord with great skill, stranger. Do you think we can let so dangerous a one, or these pride-fathers whom you have now made into firm allies, leave here alive?"

"*Ja*," answered Van Rijn complacently through Joyce. "Because I did not really stir up trouble, only prove to your own big benefits that you can't trust each other and need human peoples to keep order. For see you, with humans and their weapons around, who have an interest in peace between clans and Hordes, some Yagola with a few guns can't accomplish anything. Or if they truly don't have guns, there is still no reason for the city to work foot in shoe with them if humans return peacefully and do not want revenge for their dome. So either way, the right balance is restored between herders and town. Q.E.D."

"But why should the sky-folk wish to establish themselves here?" Akulo argued. "Is your aim to take over the rightful functions of Kusulongo the City? No, first you must slay each one of us on the mountain!"

"Not needful," Van Rijn said. "We make our profit other ways. I have asked out the lady here about the facts while we was en route, and she dovetails very pretty, let me tell you. *Ja*... Joyce... you take over now. I am not sure how to best get the notion across when they haven't much chemical theory."

Her mouth fell open. "Do you mean – Nick, do you have an answer?"

"*Ja, ja, ja*." He rubbed his hands and beamed. "I worked that out fine. Like follows: my own company takes over operations on t'Kela. You Esperancers help us get started, natural, but after that you can go spend your money on some other planet gone to seed... while Nicholas van Rijn takes money out of this one."

"*What*, what are you thinking?"

"Look, I want kungu wine, and a fur trade on the side might also be nice to have. The clans everywhere will bring me this stuff. I sell them ammonia and nitrates from the nitrogen-fixing plants we build, in exchange. They will need this to enrich their soils – also they will need to cultivate nitrogen-fixing bacteria the way you show them – to increase crop yields so they can buy still more ammonia and nitrates. Of course, what they will really do this for is to get surplus credit for buying modem gadgets... guns, especial. Nobody with hunter instincts can resist buying guns; he will even become a part-time farmer to do it. But also my factors will sell them tools and machines and stuff, what makes them slowly more civilized the way you want them to be. On all these deals, Solar Spice & Liquors turns a pretty good profit."

"But we didn't come to exploit them!"

Van Rijn chuckled. He reached up to twirl his mustache, clanked a hand against his helmet, made a face, and said, "Maybe you Esperancers didn't, but I sure did. And don't you see, this they can understand, the clans. Charity is outside their instincts, but profit is not, and they will feel good at how they swindle us on the price of wine. No more standoffishness and suspicion about humans – not when humans is plainly come here on a money hunt. You see?"

She nodded, half dazed. They weren't going to like this on Esperance; the Commonalty looked down from a lofty moral position on the Polesotechnic League; but they weren't fanatical about it, and if this was the only way the job could be one... Wait. "The Ancients," she objected. "How will you conciliate them? Introducing so many new elements is bound to destroy the basis of their whole economy."

"Oh, I already got that in mind. We will want plenty of native agents and clerks, smart fellows who keep records and expand our market territory and cetera. That takes care of many young Ancients... silly name... As for the rest,

though, maintaining the power and prestiges of the city as a unit, that we can also do. Remember, there are oil wells to develop and electrolysis plants to build. The electrolyzer plants will sell hydrogen to the ammonia plants, and the oil-burning operation can sell electricity. Hokay, so I build these oil and electrolyzer plants, turn them over to the Ancients to run, and let the Ancients buy them from me on a long-term mortgage. So profitable and key facilities should suit them very well, *nie?*" He stared thoughtfully into a dark corner. "Um-m-m... do you think I can get twenty percent interest, compounded annual, or must I have to settle for fifteen?"

Joyce gasped a while before she could start searching for Kusulongo phrases.

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They went down the mountain toward sunset, with cheers at their back and campfires twinkling below to welcome them. Somehow the view seemed brighter to Joyce than ever erenow. And there was beauty in that illimitable westward plain, where a free folk wandered through their own lives. The next few weeks, waiting for the ship, won't be bad at all, she thought. In fact, they should be fun.

"Another advantage," Van Rijn told her smugly, "is that making a commercial operation with profit for everybody out of this is a much better guarantee the job will be continued for long enough to save the planet. You thought your government could do it. Bah! Governments is dayflies. Any change of ideology, of mood, even, and poof goes your project. But private action, where everybody concerned is needful to everybody else's income, that's stable. Politics, they come and go, but greed goes on forever."

"Oh, no, that can't be," she denied.

"Well, we got time in the car to argue about it, and about much else." Van Rijn said. "I think I can rig a little still to get the alcohol out of kungu. Then we put it in fruit juice and have a sort of wine with our meals like human beings, by damn!"

"I... I shouldn't, Nicky... that is, well, us two alone..."

"You is only young once. You mean a poor old man like me has got to show you how to be young?" Van Rijn barely suppressed a leer. "Hokay, fine by me."

Joyce looked away, flushing. She'd have to maintain a strict watch on him till the ship arrived, she thought. And on herself, for that matter.

Of course, if she did happen to relax just the littlest bit...

...after all, he really was a very interesting person.

**THE END**

## THE CHRONOLOGY OF THE TECHNIC CIVILIZATION

*The Technic Civilization series sweeps across five millennia and hundreds of light-years of space to chronicle three cycles of history shaping both human and non-human life in our corner of the universe. It begins in the twenty-first century, with recovery from a violent period of global unrest known as the Chaos. New space technologies ease Earth's demand for resources and energy permitting exploration of the Solar system.*

### ca. 2055

"The Saturn Game" (*Analog Science Fiction*, hereafter *ASF*, February, 1981)

### 22nd century

The discovery of hyperdrive makes interstellar travel feasible early in the twenty-second century. The Breakup sends humans off to colonize the stars, often to preserve cultural identity or to try a social experiment. A loose government called the Solar Commonwealth is established. Hermes is colonized.

### 2150

"Wings of Victory" (*ASF*, April, 1972)

The Grand Survey from Earth discovers alien races on Yithri, Merseia, and many other planets.

### 23rd century

The Polesotechnic League is founded as a mutual protection association of space-faring merchants. Colonization of Aeneas and Altai.

### 24th century

"The Problem of Pain" (*Fantasy and Science Fiction*, February, 1973)

### 2376

Nicholas van Rijn born poor on Earth Colonization of Vixen.

### 2400

Council of Hiawatha, a futile attempt to reform the League. Colonization of Dennitza.

### 2406

David Falkayn born noble on Hermes, a breakaway human grand duchy.

### 2416

"Margin of Profit" (*ASF*, September, 1956) [van Rijn]

"How to Be Ethnic in One Easy Lesson" (in *Future Quest*, ed. Roger Elwood, Avon Books, 1974)

### 2423

"The Three-Cornered Wheel" (*ASF*, April, 1966) [Falkayn]

### 2420s (stories overlap)

"A Sun Invisible" (*ASF*, April, 1966) [Falkayn]

"The Season of Forgiveness" (*Boy's Life*, December, 1973) [set on same planet as "The Three-Cornered Wheel"]

*The Man Who Counts* (Ace Books, 1978 as *War of the Wing-Men*, Ace Books, 1958 from "The Man Who Counts," *ASF*, February-April, 1958) [van Rijn]

"Esau" (as "Birthright," *ASF* February, 1970) [van Rijn]

"Hiding Place" (*ASF*, March, 1961) [van Rijn]

### 2430s (stories overlap)

"Territory" (*ASF*, June, 1963) [van Rijn]

"The Trouble Twisters" (as "Trader Team," *ASF*, July-August, 1971) [Falkayn]

"Day of Burning" (as "Supernova," *ASF* January, 1967) [Falkayn]

Falkayn saves civilization on Merseia, mankind's future foe.

"The Master Key" (*ASF* August, 1971) [van Rijn]

*Satan's World* (Doubleday, 1969 from *ASF*, May-August, 1968) [van Rijn and Falkayn]

"A Little Knowledge" (*ASF*, August, 1971)

The League has become a set of ruthless cartels.

**2446**

"Lodestar" (in *Astounding: The John W. Campbell Memorial Anthology*. ed. Harry Harrison. Random House, 1973) [van Rijn and Falkayn]

Rivalries and greed are tearing the League apart. Falkayn marries van Rijn's favorite granddaughter.

**2456**

*Mirkheim*. (Putnam Books, 1977) [van Rijn and Falkayn]

The Babur War involving Hermes gravely wounds the League. Dark days loom.

**late 25th century**

Falkayn founds a joint human-Ythrian colony on Avalon ruled by the Domain of Ythri. [Same planet—renamed—as "The Problem of Pain."]

**26th century**

"Wingless" (as "Wingless on Avalon," *Boy's Life*, July, 1973) [Falkayn's grandson]

"Rescue on Avalon" (in *Children of Infinity*. ed. Roger Elwood. Franklin Watts, 1973)

Colonization of Nyanza.

**2550**

Dissolution of the Polesotechnic League.

**27th century**

The Time of Troubles brings down the Commonwealth. Earth is sacked twice and left prey to barbarian slave raiders.

**ca. 2700**

"The Star Plunderer" (*Planet Stories*, hereafter *PS*, September, 1952)

Manuel Argos proclaims the Terran Empire with citizenship open to all intelligent species. The Principate phase of the Imperium ultimately brings peace to 100,000 inhabited worlds within a sphere of stars 400 light-years in diameter.

**28th century**

Colonization of Unan Besar.

"Sargasso of Lost Starships" (*PS*, January, 1952)

The Empire annexes old colony on Ansa by force.

**29th century**

*The People of the Wind* (New American Library from *ASF*, February-April, 1973)

The Empire's war on another civilized imperium starts its slide towards decadence. A descendant of Falkayn and an ancestor of Flandry cross paths.

**30th century**

The Covenant of Alfazar, an attempt at détente between Terra and Merseia, fails to achieve peace.

**3000**

Dominic Flandry born on Earth, illegitimate son of an opera diva and an aristocratic space captain.

**3019**

*Ensign Flandry* (Chilton, 1966 from shorter version in *Amazing*, hereafter *AMZ*, October, 1966).

Flandry's first collision with the Merseians.

**3021**

*A Circus of Hells* (New American Library, 1970. incorporates "the White King's War," *Galaxy*, hereafter *Gal*, October, 1969).

Flandry is a Lieutenant (j.g.).

**3022**

Degenerate Emperor Josip succeeds weak old Emperor Georgios.

**3025**

*The Rebel Worlds* (New American Library, 1969)

A military revolt on the frontier world of Aeneas almost starts an age of Barracks Emperors. Flandry is a Lt. Commander, then promoted to Commander.

**3027**

"Outpost of Empire" (*Gal*, December, 1967) [not Flandry]

The misgoverned Empire continues fraying at its borders.

**3028**

*The Day of Their Return* (New American Library, 1973) [Aycharaych but not Flandry]

Aftermath of the rebellion on Aeneas.

**3032**

"Tiger by the Tail" (*PS*, January, 1951) [Flandry]

Flandry is a Captain and averts a barbarian invasion.

**3033**

"Honorable Enemies" (*Future Combined with Science Fiction Stories*, May, 1951) [Flandry]

Captain Flandry's first brush with enemy agent Aycharaych.

**3035**

"The Game of Glory" (*Venture*, March, 1958) [Flandry]

Set on Nyanza, Flandry has been knighted.

**3037**

"A Message in Secret" (as *Mayday Orbit*, Ace Books, 1961 from shorter version, "A Message in Secret," *Fantastic*, December, 1959) [Flandry]

Set on Altai.

**3038**

"The Plague of Masters" (as *Earthman, Go Home!*, Ace Books, 1961 from "A Plague of Masters," *Fantastic*, December, 1960- January, 1961.) [Flandry]

Set on Unan Besar.

**3040**

"Hunters of the Sky Cave" (as *We Claim These Stars!*, Ace Books, 1959 from shorter version, "A Handful of Stars," *Amz*, June, 1959) [Flandry and Aycharaych]

Set on Vixen.

**3041**

Interregnum: Josip dies. After three years of civil war, Hans Molitor will rule as sole emperor.

**3042**

"The Warriors from Nowhere" (as "The Ambassadors of Flesh," *PS*, Summer, 1954.)

Snapshot of disorders in the war-torn Empire.

**3047**

*A Knight of Ghosts and Shadows* (New American Library, 1975 from *Gal* September/October-November/December, 1974) [Flandry]

Set on Dennitza, Flandry meets his illegitimate son and has a final tragic confrontation with Aycharaych.

**3054**

Emperor Hans dies and is succeeded by his sons, first Dietrich, then Gerhart.

**3061**

*A Stone in Heaven* (Ace Books, 1979) [Flandry]

Admiral Flandry pairs off with the daughter of his first mentor from *Ensign Flandry*.

**3064**

*The Game of Empire* (Baen Books, 1985) [Flandry]

Flandry is a Fleet Admiral, meets his illegitimate daughter Diana.

#### early 4th millennium

The Terran Empire becomes more rigid and tyrannical in its Dominate phase. The Empire and Merseia wear each other out.

#### mid 4th millennium

The Long Night follows the Fall of the Terran Empire. War, piracy, economic collapse, and isolation devastate countless worlds.

#### 3600

"A Tragedy of Errors" (*Gal*, February, 1968)

Further fragmentation among surviving human worlds.

#### 3900

"The Night Face" (Ace Books, 1978, as *Let the Spacemen Beware!*, Ace Books, 1963 from shorter version "A Twelvemonth and a Day," *Fantastic Universe*, January, 1960)

Biological and psychological divergence among surviving humans.

#### 4000

"The Sharing of Flesh" (*Gal*, December, 1968)

Human explorers heal genetic defects and uplift savagery.

#### 7100

"Starfog" (*ASF*, August, 1967)

Revived civilization is expanding. A New Vixen man from the libertarian Commonalty meets descendants of the rebels from Aeneas.

*Although the Technic Civilization is extinct, another—and perhaps better—turn on the Wheel of Time has begun for our galaxy. The Commonalty must inevitably decline just as the League and Empire did before it. But the Wheel will go on turning as long as there are thinking minds to wonder at the stars.*

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Poul Anderson was consulted about this chart but any errors are my own.

—Sandra Miesel