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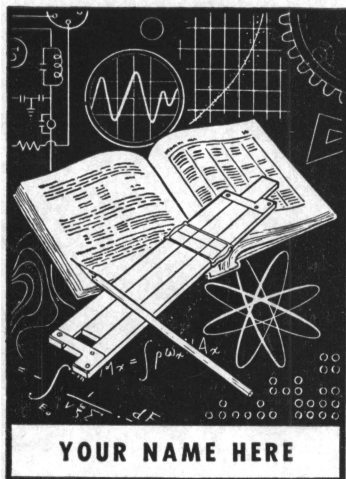
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# WORLDS OF



# SCIENCE FICTION

SEPTEMBER, 1967  
Vol. 17, No. 9  
ISSUE 118

ALL NEW  
STORIES

Frederik Pohl, Editor  
Judy-Lynn Benjamin, Associate Editor

Robert M. Guinn, Publisher  
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# A DOG'S JOB

The other day, we attended a conference in Boston on space, spacecraft and the Grand Design — that is, the overall purpose that should be, and probably is, behind all space efforts, namely to spread the human race out beyond our own atmosphere into other worlds circling our own sun — or other suns. You know. The kind of thing we've been writing about in magazines like this for nearly half a century.

One of these months we'll tell you more about some of the things that we heard about there in regard to the space program, but one of the most interesting lectures in the three-day conference, for our money, turned out to be that by our old friend R. C. W. Ettinger, who long-time readers will recall as the author of *The Prospect of Immortality*, the best-selling book (first published in extract form in our late companion magazine, *Worlds of Tomorrow*) which proposed immortality through freezing. Ettinger's talk was not primarily about space travel. In fact, it was not even primarily about freezing — although, of course, he touched on both subjects, pointing out that one way around the limiting velocity of light was to freeze the crews of interstellar spaceships, thus making it possible for them to travel a few centuries if necessary and still be in reasonably good operating condition on landing. What it was about, in essence, was nothing less than what life is all about, and why we ought to be doing things that we're probably doing anyway.

Suppose there was a dog (said Ettinger, as close as we can paraphrase an extemporaneous talk from memory) and someone gave him the job of building a bridge across the Mississippi River. He might have all the help he could summon up, in the form of a thousand packs of a million dogs each, all obedient to his will; but there would still be no hope that he could ever get the bridge built. Lacking hands, he could not build simple tools. Lacking sufficient intelligence, he could not invent more complicated ones. He could not produce strong enough materials, and he could not hoist them into place if he had them; because building a bridge across the Mississippi River is simply not a job for a dog.

I take it as axiomatic (Ettinger went on) that we can define the purpose of life as discovering what the purpose of life is. It may be that we human beings, shaped as we are, mortal as we are, limited in our capacities as we are, are simply not up to the job of discovering that purpose. But we have at least the hope that we can make ourselves wiser, increase our capacities, lengthen our lifespan. Perhaps discovering the purpose of life is not a job for a man . . . but a job that men *can* do is to reshape themselves into something that can achieve it.

Now, this is not the sort of argument that one expects to hear in the middle of three days otherwise mostly devoted to stellar signatures and optimization of multiple



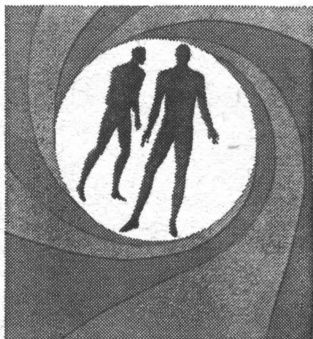
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missions by use of permissive progress-sequences, but it seemed to us then and still seemed to us that Robert Ettinger has opened a rather large can of worms.

One of the troubles with writing science fiction about the reasonably far future is that, if we are fair to our subject, we find ourselves writing about characters who are no longer entirely human. Their social customs differ from those of 1967. Their motives are not the same as ours; if they have hang-ups, they are not our hang-ups, if they are despondent or alienated, it is not for the reasons that impair our lives today.

But maybe, thinking along Ettinger's lines, we can find a little more in common with those next-evolution descendants of ours than has heretofore been possible. They may be taller than we are, or balder, or healthier; and surely they will be wiser, perhaps in ways that we cannot understand. But if Ettinger is right and they are some part of some Grand Design, perhaps we can recognize in them that it is *our* Grand Design they are working on.

And perhaps what Ettinger said is only another way of saying what H. G. Wells said more than half a century ago: "We have suffered like animals long enough; it is time we began to suffer like men."

\* \* \*

To change the subject, our conscience requires us to admit something. Now that you are (we hope) well hooked on James Blish's brilliant *Faust Aleph - Null*, we should confess to you that when we first read it, and enjoyed it enormously, we were much perplexed about whether you would like it as well — because it is not, we admit, really a *science-fiction* story at all. It should by all rights appear in a magazine like *Unknown* or *Beyond* — if they still existed. Unfortunately, they don't; and so stories like this don't have a proper home in any magazine being published today.

We would like to give them such a home from time to time. What do you think? Is an occasional fantasy a pleasant change now and then? Or should we stick to more orthodox science fiction? *Hue and Cry* will be waiting to hear your answers . . .

And if, while we think of it, your interest in sorcery has been spurred by Blish's novel and you want to read more about it, you can hardly do better than a book we just finished reading: *Spirits, Stars and Spells*, by L. Sprague and Catherine C. de Camp. It's not an expose, but it does have some hard-headed things to say about the fallacies of most necromantic accounts — and may be a very necessary countermeasure after you've read *Faust Aleph-Null*

— The Editor

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INTERNATIONAL SCIENCE FICTION STORIES

# ***THE FORTUNES OF PEACE***

by C. C. MacAPP

Illustrated by FINLAY

*Something strange was in orbit,  
too small to see, too powerful to  
escape — and it had caught them!*

I

That sector of the galaxy was Treaty territory — that is, open and unpoliced — so the Terran freighter had every right to be there. Nevertheless, she was a long way from home; and, mankind being just fledged in space, with a relatively weak Space Force, it was no wonder the freighter had run into trouble.

“Taintless” Wend, who was Earthborn but could no longer claim citizenship, sat watching the freighter’s image swell on the main viewscreen of the Kyshan ship aboard which he was either guest or prisoner. He saw no signs of damage, so the freighter must have been taken by subterfuge rather than assault. Junnabl — his present host — was a versatile pirate.



Wend turned to the Kyshan. "Is *this* all you wanted me for? You could navigate her yourself. I know you read English as well as you speak it."

Junnabl grinned. That consisted of curling his upper lip (pasty-green like the rest of his skin) and drooping the corners of his mouth, showing several dozen close-packed sharp teeth, while his amber eyes changed not one whit. "Iss true spend effort to learn. Now looks not waste. Have splendid job for you. See, soon."

Wend shrugged. They had him over a barrel. He shouldn't have holed up so close to Kyshan territory.

He heard a shuttleboat coupling to the aft lock, to take them over to the freighter.

**H**alf an hour later, he turned from the captured ship's control console and faced Junnabl. "I won't play stupid. There's nothing about this freighter that wouldn't pass for an ordinary commercial ship, but she's too shipshape, too perfectly tuned up. A TSF crew, and a good one, manned her, I would guess. Where are they now?" fast. Iss pleasure hire smart man.

Junnabl showed his teeth again. "Are in safe keeping. You guess fast. Iss pleasure hire smart man. You not love TSF. Correct?"

Wend said, "I didn't leave it under the most cordial circumstances. Still, Earth was my birthplace."

The Kyshan laced his longer-than-human fingers before his thick chest. "Am not fool enough to ask

big treason. Are sizes of treason, yes? This ship little sneak-play by TSF. Cargo of value somewhere, hidden. I want. When get, crew go free."

Like hell, Wend thought. They're undoubtedly dead. He kept his face impassive and waited.

Junnabl flicked a long palid-green finger at a collar-radio and said for the latter's benefit, in Kyshan, "Bring the Terran skipper's uniform and other things." Then he told Wend, in English, "Were well hidden aboard. Uniform iss now made to fit you. You get idea?"

Wend tried not to scowl. "Sure, I get it. An impersonation. Haven't you ever head of fingerprints and descriptions?"

Junnabl said placidly, "I hire smart man, expect him fix details. On Norp — you know Norp? — are sealed orders this ship suppose pick up. You get, I get hidden cache, give you back little yacht I find you in, give you bundle money, shake hands, good-bye. Okay?"

Wend couldn't help grinning. He wondered if Junnabl actually expected him to believe that. He said, "I'd have to land on Norp without uniform, first, to look at the setup."

Junnabl laced his long fingers again. "Of course. We go there next."

## II

**D**ressed like some space roustabout, Wend strolled by the TSF office, not too close. It wasn't much — a small concrete building in the local style, on the east side of

the spaceport, away from town. He could hear the clack of a typewriter inside. Outside the door a human corporal, wearing a holstered rupter, loitered in the shade of a low, wide-spreading tree. Four small aircars were parked to one side of the building. Obviously TSF did little business on Norp, which wasn't surprising. A Terran ship was a rarity here.

What he had to get from the backwater office was a padlocked dispatch case. There was, it seemed, a list of five TSF officers who might call for it. Though the orders Junnabl had found didn't specifically say so. Wend was sure the local C.O. would have photos and fingerprints of all five. The one who'd fallen into Junnabl's hands was a Commander Waldron, which meant nothing to Wend. He didn't think he could risk a direct impersonation, anyway.

Casually, he strolled toward the busy side of the field; turned between two buildings and stopped, pretending to fiddle with the zipper of his jacket. He was careful not to look at the Norpan who went by a little too hastily. So Junnabl had hired people to watch him.

He stepped into the open again and looked for a visiphone booth, choosing one that was exposed on all sides. He didn't want anyone sneaking up and using some listening device. He entered and pulled the door shut.

There was a directory-scanner. He deposited a coin and punched for "Importers"; let the names scroll down across the viewer; stopped

the device at "Vassun Garka, Inc., Exotic Foods." If this were the same family . . . . He contributed another coin and waited.

A polite Norpan face appeared on the screen. The slit-eyes blinked once. "Apologies, sir. I speak no Terran languages."

Wend answered in Kyshan, which he spoke better than Norpan. "Not needful." He held up a plastic card with one of his aliases on it and an orange triangle in the corner. He waited for the clerk's eyes to widen at the implied credit rating, then said, "Secrecy desired. Is there someone familiar with the star called Hane?"

The face — similar to a Kyshan's but swarthier, the two races having diverged a little — twitched and became impassive. "I have not heard of such a star."

Wend nodded politely. "Perhaps a coincidence of names. I had dealings there once with a Loob Garka, also in the import business."

The clerk said tonelessly, "If you will wait, I will make inquiries, sir." The face vanished.

Minutes passed, then a more mature face appeared on the screen. The eyes glanced at the credit-voucher. "I do not know you, sir, nor do I know Loob Garka. But how may I serve you?"

"Perhaps you know me as 'Taintless' Wend."

The face changed just slightly. "Ah."

Wend said, "I am followed. I would discuss mutual profit, but I must evade watchers in a way that would not arouse suspicions."

The teeth showed in a smile. "You flatter me in seeking my arrangements in such a matter. But go, in ten minutes, to the Chief Dispatcher of airtaxis and ask him, loudly enough to be overheard to send you to the Vale of Amethyst Joys. He will, instead, place you with a trustworthy driver who will bring you to the Cradle of Mercies, where I will meet you. It will be arranged that you are not followed."

The Cradle of Mercies, though it undoubtedly catered to the cruder desires as well as the more delicate ones, was relatively quiet and meticulously clean. The lobby was dimly lit, and scented with something like lavender plus sandalwood. Various curtained portals led off it. From one came a buzz of Norpan voices and a fan of light as a provocatively clad female held the curtain aside for a moment to gaze around the lobby.

The attendant who'd instantly approached Wend led him through a different door, along a dim corridor, and into a small, plain, well lighted room. The Norpan to whom Wend had talked via visiphone sat cross-legged on a thick cushion, across a low table from a similar cushion. The attendant left, closing the door. Wend's host glanced at the bolt on the inside of the door.

Wen — now understanding the courtesy of letting him bolt the door — did so. He appreciated the cushion, too, which meant his host knew enough about him to know he'd be comfortable on it. A strange Terran would be given a chair.

On the low table were two self-warmed bowls holding, respectively, roasted nuts and what looked like an equivalent of barbecued prawns. A generous decanter was neck-full of an amber liquor. Two tumblers of opalescent crystal waited. Wend seated himself and answered his host's slight bow. The Norpan glanced at the decanter, then, as Wend made the palm-up gesture of assent, poured liquor. Not until each had sipped did he speak. "You honor me. I am Vassun Garka, and Loob Garka is my cousin. How may I serve you?"

Wend speared one of the prawns with a small silver skewer. "Mine is the honor. You know, doubtless, that I arrived on a Kyshan corsair."

Vassun turned a palm up. "Yes. Junnabl's."

Wend continued, "Junnabl has conscripted me for a bit of theft. If the booty is what I suspect, I am not adverse to taking some of it. However, I do not want to share it with Junnabl, nor do I care to rely upon his promises."

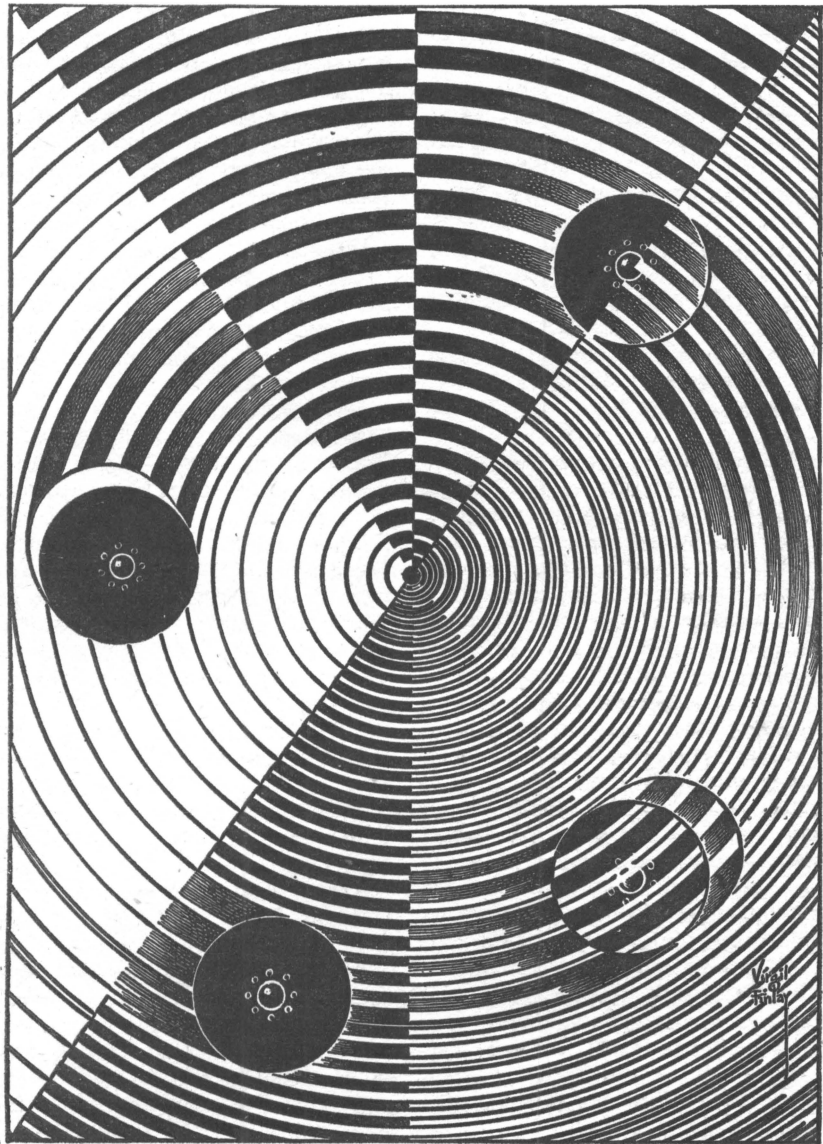
Vassun looked amused. "You find my own race more reliable?"

Wend grinned. "There are Norpan pirates as deadly as Junnabl. But I feel your own family is more likely to let me live. How is Loob, by the way?"

The Norpan chose a roast nut. "Active, and still unchanged. You mentioned his home base. I hope this project of Junnabl's does not lie in that direction?"

Wend turned a palm down. "Junnabl has mentioned no direction, and does not yet have one. Perhaps I





should not have mentioned Hane."

"It does not matter," Vassun said.  
"The clerk is discreet."

Wend sipped more of the liquor, which was like fortified wine. "Well, here's the project." He told about the secret orders. "What I hope to do is switch dispatch cases. I have a tentative plan that will require certain gadgets I can't buy openly. And I want a small padlock specially made. But mainly, I want help getting free of Junnabl. He has my yacht, but if the booty's what I suspect, I can buy a new yacht."

Vassun looked interested. "And you suspect what?"

"Well, I happen to know that before the Treaty was signed, TSF feared it might be drawn into the fighting somewhere out here. There was a secret cache somewhere, in case supplies were cut off. This freighter Junnabl has captured could not haul much in the way of missiles or other heavy weapons. Nor would food and such be worth recovering. So I think it's fuel. TSF uses a synthetic fissionable similar to the one you use. You know how much *that's* worth per pound. I judge this freighter could stow and lift five hundred tons. I think there'll be that much, or more."

"Ah," Vassun said, reaching for his glass a little quickly. "Yes. And what terms have you in mind?"

"I get one-fourth," Wend said. "You get one-fourth. We load the other half aboard the freighter and send her back to Earth."

Vassun blinked. "I did not know

you were such a loyal patriot."

Wend held a palm down. "Earth wouldn't miss the whole cargo too much. But if we took all of it, TSF might feel stung enough to do something. Pass rumors around, if nothing else. If they get half of it back, they'll keep quiet. After all, they won't be anxious to admit trying to recover it."

Vassun considered slowly, turning his tumbler in his long fingers. Finally, "You may be right. But if there are other things at the cache? Munitions?"

Wend told him, "I'm not interested in them, nor is TSF, probably. You can help yourself. Now, here's how I hope to get the secret orders." Wend outlined his plan briefly and described certain gadgets he needed. "If you'll have those ready, I can pick them up when I land again, in uniform, to pull off the switch. Then, as soon as I know what the orders are, I'll get word to you where you can find us — Junnabl and me, I mean. I'll devise some way to make myself expendable for that long. I can't plan in detail until I see the orders, which I'll do before I take them to him. Do you follow me?"

Vassun considered briefly. "Yes."

"Fine, then." Wend got up. "I don't want to be a hasty guest, but Junnabl will be furious that I've dropped out of sight this long. Will you excuse me?"

"Of course." Vassun stood up and held out his hand, in the Terran gesture. "One question that has interested me, if you will permit?"

"Of course."

"Why do you have the nickname you do?"

"Taintless?" Oh, it goes back to my court-martial. My defense attorney got carried away and used the word. It was so inapplicable to me, everybody laughed. And it stuck."

Vassun smiled. "Ah. Forgive my curiosity." He waited for Wend to unbolt the door.

Junnabl did a poor job of hiding his rage. "Wass a very long look, Terran!"

Wend tried to look injured. "Well, naturally I did more than stroll by! I made inquiries around town. There's no Night Duty Officer just one enlisted guard. I can handle him, and I've got a plan. I'll need Waldron's dispatch case and his luggage. You'll have to land me in a shuttleboat and stay in orbit, giving a false ship's name so I can say I'm traveling on verbal orders, via available transportation. What I intend to do is switch dispatch cases."

A slight muddiness suffused Junnabl's face. "Iss not likely they will be that easy to fool!"

Wend told him, "There's a way to manage it. But you'll have to be ready to pick me up fast when I walk out of the place."

### III

The Senior Lieutenant on Norp was eager to talk. "Is something up, Commander? We've got . . . we've heard rumors, but they're vague. Will the Treaty blow up?"

Wend (who was calling himself Shea) grinned at him. "No. You'd have to go out of the Lenj sector to find any real fighting, and we're not involved in any way. All I know is I'm supposed to wait here for a ship and further orders." He set Waldron's dispatch case on the corner of the Lieutenant's desk. "Can you lock this up somewhere while I go look for a hotel?"

"Of course, Commander. I'll put it in the safe. If you like, sir, we can phone for hotel reservations."

Wend grinned again. "Thanks, but I'd just as soon look around a little. I've built up quite a thirst. I'll send for my luggage." He moved the two bags closer to the wall, started for the front door, then paused. "Will the Night Duty Officer be able to get me that dispatch case? There's a lot of stuff in it I'm supposed to be studying."

The Lieutenant looked guilty. "We don't have a Duty Officer at night, sir." He glanced at the safe in the rear of the office. "I'll leave the combination with the guard. He's reliable."

Wend nodded. "Thanks. Maybe I'll see you around town tonight."

Norp's orange sun had set when Wend returned to the office, nervous about what lay ahead but glad to have the long afternoon over. The office lights were already on. He wiped his palms on a handkerchief and entered.

The guard was sergeant, Category M. P. That wasn't too good. He stood up. "Yes, sir, Commander Shea?"



Wend nodded. "They didn't tell me it was so hot here. I hope it cools off at night."

"It does, sir, if the breeze is right. Did you find an air-conditioned hotel?"

"Yes, finally." Wend glanced toward the safe. "I left a dispatch case."

"Yes, sir. I'll get it."

Wend followed the man as casually as he could. He had to be close enough to use the small gas-gun Vassun Garka had gotten him. He put a hand in his pocket, ready to draw the weapon. The M.P. knelt and worked at the safe dial. It seemed a long time before he pulled the door open. Wend took one step nearer. He drew the weapon, aimed it and pressed the stud, clearing his throat to camouflage the faint hiss. He must hold his own breath now. He saw the faint mist billow out, dispersing quickly. The M.P. had Waldron's dispatch case out now, was about to swing the safe shut. Wend said abruptly, "Sergeant, my luggage . . ."

The kneeling man turned his head. He started to say something, then looked puzzled. "Your. . . ."

Wend stepped closer. "What's the matter? You look sick!"

The man swayed; put a hand on the floor to steady himself. Belatedly, suspicion flooded his face. He made an awkward move toward his holster; changed his mind and reached to shove at the safe-door. Wend thrust a foot in the way. He had his fist doubled, but the gas was swift. The M.P. toppled, pawed at the floor and lay still. He'd sleep

for hours, Vassun had promised, and awake with a temporary amnesia. Wend reached into the safe, seized the dispatch case, tossed Waldron's in, slammed the door and gave the dial a spin, then hurried with the other dispatch case to the desk that held the typewriter.

There was a regulation small padlock on the case. He drew from his hip pocket a pair of cutters — another of Vassun's contributions — and cut the link. He glanced at the door, then opened the case.

He re-read the meat of the orders: "Proceed to given co-ordinates and make sure there is no pursuit before approaching the planet. At specified latitude and longitude, fly a search pattern, using ship's metal-detector to locate the cache. Approximately ten feet of soil and loose rock must be removed."

He studied the description of the planet. A lifeless, uninviting one, and not handy to anywhere. He memorized all figures, then found the office's disposal-slot and thrust into it the orders, the gas-gun, the cut padlock and the cutters.

He looked for TSF stationery without a local address, found it, added carbon paper and a second sheet, rolled the whole into the typewriter and sat frowning anxiously. He had to make decisions fast. Did he want to tell Garka the true location of the cache? He thought not. The Garkas weren't cutthroats — not ordinary — but they were capable of seizing the loot and pondering the agreement later.

Inspiration came. He glanced at the door and at the inert man near the safe, then, laboriously, with muttered curses, began to type.

When he'd finished, the fake orders read, in part, "You will identify yourself before landing, then present these orders to the garrison Commander."

The co-ordinates he gave were not those of the cache planet. He hoped — this was one of his risks — that they wouldn't be familiar to Junnabl. They were the co-ordinates of the uncatalogued, little known star called Hane.

He addressed the envelope to Garka Imports, put a copy of the faked orders in it and went to drop it in the mail-slot. Then he looked hastily around the office to make sure he'd left no evidence. He hurried to the unconscious guard, dragged him to the Duty Desk and arranged him on the floor as if he'd fainted and fallen from his chair. Finally he put the faked orders in the dispatch case and locked that with the special two-key padlock Vassun had gotten made for him.

As he stepped from the office with the case under his arm, an air-taxi swooped down for him.

Junnabl, a flat key gripped between long thumb and forefinger, looked up from the dispatch case with a scowl. "What iss this?"

Wend glanced at the two-key padlock. It's a common security device in TSF," he lied. "I suppose the C.O. on Norp has the second key. I had no chance to find out for sure."

Junnabl stared at him coldly for a moment, then, in an angry motion, drew a rupter and blasted the padlock. Wend ducked to avoid splattering metal. The Kyshan jerked the case open and reached greedily for the thin envelope inside. He tore that open, unfolded the orders and began to read, silently but with lip-movement, holding the document so Wend couldn't see it. His face muddled. He darted a look at Wend, then went back to the orders.

Wend could tell when the alien reached the end and started through. He could tell when Junnabl began to repeat the space co-ordinates to himself.

Suddenly the pirate stiffened. His eyes went wide, then narrowed. The glance he threw at Wend was half-absent.

*God, Wend thought, with a sudden knot in his middle, He recognizes those co-ordinates!*

After a minute Junnabl looked at him again. "I can not pay you off yet."

Wend tried to act surprised and angry. "What do you mean? I've done my part of the job!"

The pirate's teeth showed. "Iss other part of job. And iss something strange. You will come with me. But you will not enter control room during trip." He gestured for a guard.

Wend protested a little, but went with the hard-faced crewman. As he left the patrol room, he heard Junnabl placing a ship-to-planet radio call.

The call was to Garka Imports.

The trip would take a little more than a hundred hours, assuming Junnabl went direct to Hane. All Wend knew was that the freighter was in acceleration and would be ready to Translocate in a few hours.

He could only guess what Junnabl had said to Garka, or what Garka's reaction was to the call. Garka might have let something slip.

Not that Junnabl needed any more alerting. Wend's impulsive use of Hane as an ambush point had been a bad misstep. At the best, Junnabl knew the Garkas were involved somehow. Very few people knew where Hane was — the star was rather isolated, with only one livable planet — but obviously Junnabl knew. And he'd be wondering hard how it was that a TSF garrison should exist there. He'd assume there was some deal between TSF and the Garkas.

What made it especially galling was that Vassun wouldn't get the envelope Wend had mailed him until hours after Junnabl's call.

Then, too, there was the chance that someone at the TSF office just might sort through the outgoing mail and wonder what business they had with Garka Imports.

And just in case Wend ran out of things to worry about, there was something peculiar about Hane itself, or the area around it. The time he'd been there, he'd been piloted in by a Loob Garka henchman. Ships, he knew, had on occasion blundered into something fatal near Hane; and the Garkas might just be angry enough to let Junnabl do likewise.

#### IV

Wend spent most of the trip in his cubicle — the one that had belonged to Commander Waldron. When he did wander about the ship, there was always at least one Kyshan guard with him and others within call. They let him visit most parts of the ship, but made it plain he was to touch nothing. He stayed alert for any chance to overpower a guard or seize a weapon, but these weren't amateurs. The deep-chested, stocky Kysh moved like cats and were as ready as cats, and they knew how much distance to keep between him and themselves. Unless he got an unexpected break, he'd have to play out the hand he'd dealt himself.

The freighter was in Translocation now, flashing through some limbo that only abstruse mathematics could describe. Wend had no way of knowing for sure they were headed for Hane. When he asked Junnabl their destination, it was only to maintain his pose of co-operation. Junnabl told him nothing.

He wondered about Junnabl's flotilla. No doubt it would be somewhere handy if needed.

The hours crawled by, and he began to watch his chronometer. Hane, if that is where they were headed, shouldn't be far now.

Then — at about the right time — he heard the sounds and felt the vibrations that meant they'd popped into normal space again. The ship's artificial gravity shifted and wavered, trying to fit itself to deceleration, and finally succeeded. And



now Wend was herded to his cubicle and told to stay there.

He sat on the bunk listening to the sounds of the ship. Work was going on somewhere — repairs or alterations to the machinery.

Presently he felt a jar. Something — a shuttleboat, maybe — had coupled on. Shortly after that, there were complex maneuvers. He could not tell what was going on, but they might be matching orbits with something. Were they in orbit around Hane? If so, where was Loob Garka?

There was another mild jar — the shuttleboat was pushing off, perhaps. Then silence. The gravity, at about one-third G, was steady. He listened. The air-conditioners hummed. And what was that other sound? A generator, to keep the ship's minor machinery running. But the drive was silent.

So they were in orbit somewhere, or drifting free.

They? He hadn't heard a sound since the shuttleboat's departure to indicate anyone but himself aboard.

He was on his feet swiftly, senses taut. He tried the door and found it unlocked, saw no guard in the corridor. He ran toward the central well; found only dim standby lights on. He turned on full lighting, hauled himself up the ladder to the control room, flipped switches and studied instruments.

The main computer was dead. So were the drive and, of course, the radio. He wasn't going anywhere, and he wasn't going to call help. But the artificial gravity remained at a third-G, and the view-

screens were working. He turned on the main one.

The brilliant star that crawled across the screen could be Hane, twenty or thirty million miles away. That it crawled as it did meant the ship had a slow end-over-end tumble. He began increasing magnification, and cranking the view to follow the star.

A dimly lit oblong blob caught his eye. That was another ship within a few miles of him, faintly illuminated by Hane's distant light. He could see she was a derelict, holed in more than one place. Watching her, he suddenly realized that she, and his own ship, were in orbit about something.

He started to look for that, but before he found it he saw other ships — dozens of them — all apparently unmanned, many of them damaged, swinging in parking orbits. The orbits were fantastically quick. His own wasn't much over five minutes. They averaged, he'd guess, four or five hundred miles in radius. "God," he muttered, "what kind of gravity-monster. . . ."

It took him half an hour to spot it, and then he saw no disk — just an odd localized distortion of the light from distant stars. Something too small to see had a gravity sufficient to hold these ships in their tight orbits.

Had they gotten caught by accident? Hardly. The orbits were precisely circular, obviously planned. This must be Loob Garka's junkpile, where he hid captured ships — too far from Hane to reflect much

light, close enough to be reached in a hurry.

And Junnabl knew about it. Wend saw the Kyshan's audacity now. He'd hidden Wend here where Loob would least suspect, while Junnabl went to negotiate with Loob. At least, that meant Junnabl hadn't mentioned Wend to either Vassun or Loob. Message-drones would have undoubtedly flashed between Vassun and Loob long before now.

But what was this monstrous gravity-well? It could only be a chunk of nuclear matter—a "bone" of some dead star, perhaps — of fantastic density. No wonder it didn't reflect Hane's light. Its surface gravity was too high!

So Hane had a companion — a dark, secret, dwarf-monster. Thinking back over bits of gossip he'd heard, stories of what had befallen wandering ships, he could understand. He wondered if, in fact, there weren't a number of tiny black dwarfs around Hane. It would take a multiple system to explain some of the stories.

God help a ship that, approaching normally in the plane of the visible star's planets, blundered too close to one of these things! Tidal forces alone could destroy her.

Well, he was safe here for the moment. He got up to make a quick tour of the ship, to see what they'd left him.

This freighter — *Wargentin* was her name — was, overall, a squat cylinder about as long as she was wide. Amidships, halfway

between the flat ends and parallel with them, was the circular Main Deck, nearly ten feet thick, which contained among other things the artificial gravity machinery. Within the ship it didn't behave entirely like natural, mass-induced gravity. It focused in (or, more precisely, "drew from") opposite directions toward the main deck, so that it was reversed in the two halves of the ship. The focusing made the pull in the control room, sixty feet forward, virtually as strong as at the deck itself. Farther away — outside the ship — the force reverted, by degrees, to the natural laws, including the inverse-square one, and pulled centripetally toward the ship from all directions.

Forward of the main deck were the living quarters and various other things, arranged radially around the central well. Gravity forward was usually kept at one-third G. Aft, the reverse-direction gravity might be low, just enough to hold loose cargo "down," or might be turned off entirely. Machinery and nonliquid storage were mostly aft.

Wend went down the central well, looking in various compartments. He reached the central hatch and went on through the deck — carefully, because the abrupt change in gravity could mess up reflexes. He found only standby lights beyond, and about a twentieth-G.

Half an hour later he started back to the control room. There was no better weapon aboard than a kitchen knife. Small but necessary parts of the drive were gone. The ship would stay livable for a

long time. But she was parked, until the drive components were put back.

He checked and found that they'd left all of it. So, then, they had transferred to Junnabl's ships.

It wasn't quite true that he was confirmed here. The two standard spacesuits were in place and in working condition. If he preferred, he could put one on and go out to die in space.

He paced the control room. "Damn it! With all this machinery . . ." He forced himself to sit down and think.

One thing Junnabl didn't know was the deal he, Wend, had made with the Garkas. Therefore, Junnabl wouldn't expect him to recognize Hane. All of that would change, though, as soon as the Kyshan was convinced the Garkas knew nothing of any TSF base. That would prove that Wend had tampered with the orders, and the whole thing would come clear, and Junnabl would hurry back for him. Probably the Kyshan would Translocate away to throw off pursuit, then sneak back. But that wouldn't take long.

Wend got out a handkerchief and wiped his palms. Risking death for a big prize was one thing, but being tortured for information, by experts, was something else. Junnabl would break him completely, until he was utterly incapable of lies.

He had to communicate with Loob Garka, quickly.

Could he rig a radio of some sort?

Sure — to communicate within a million miles or so. But it would take more than a crude spark-gap transmitter to reach Hane. Anyway, transmission that far would take many hours.

Well, he needed a message drone, then. He'd already looked to see if there were any aboard, but now he made another trip, looking everywhere he might be stowed. Junnabl had made sure there weren't any.

He went back to the control room and stood scowling at the viewscreen. What were his chances of reaching one of the other ships in a spacesuit? About as good as his chances of throwing a pebble left-handed and hitting a bee in flight a hundred feet away. Nevertheless, he tracked the closer ones and calculated as well as he could without the computer. The next ship out passed within two miles, regularly. But with relative speeds like this, a free jump of two hundred yards would be considered risky.

Still, he didn't have much to lose. At worst, he'd die in the suit and frustrate Junnabl. He studied the ship. She was *Lenjan*; a freighter, but no longer and slimmer than *Wargentin*. She was holed amidships, but looked sound otherwise. Like all the others, including *Wargentin*, she had just enough end-over-end tumble to keep her aligned along her orbit.

The chances of reaching her at all were so infinitesimal that odds against finding message drones aboard her didn't make much difference.

He swiveled the viewer, waited

for the next ship down to pass under him and studied her. A Norpan freighter. The pass was farther away, and the relative motion greater, so he rejected that alternative.

If he did make a try for the Lenj ship, he'd have to take along some bars of fuel. That was one thing that wouldn't be left in a long-parked ship, and he'd need power for lights and to warm up the tiny drone and project it, assuming he found a drone. So said aloud, "Hell! I'm thinking as if I really expected to make it out there."

Now that he'd decided to try, though, he couldn't bear pondering any more. He hurried to get one of the suits. By the time he lugged it to an airlock and went aft for three fuel bars in their cannisters and attached them to the suit, *Wargentin* had made five or six orbits and was overtaking the Lenj ship again. "Damn! I won't make it this pass."

He'd have to hurry even to get ready for the next one. He sat down and forced himself to think everything through. He must, he realized, turn off *Wargentin's* gravity so it wouldn't fight the suit's feeble drive. And he'd better leave early, so he wouldn't overshoot the outer orbit and not have time to correct.

He started toward the suit — then stiffened with a sudden thought.

*Gravity. . . .*

These parked ships didn't drift together, over any ordinary period of time, because their masses were insignificant. But *Wargentin* had gravity — and he could turn it up, fore and aft! Why couldn't he use it to pull two ships together?

Excited, he looked at his chronometer. Nine hours since Junnabl had left. How soon would he be back? It would take many passes to bring the orbits together. At the present distance, the pull would be only a fraction of a G. Did he have time? Would it work at all? He didn't see why not.

He reached for the controls, cranked the viewer around. A quarter-hour to the next pass. "Relax," he growled. "You've got a long job ahead of you."

He made sandwiches and coffee, gulped them down, then paced the compartment. *Wargentin* gradually gained on the other ship. Finally he sat down, turned up the gravity to a full two G's and let the pressure shove him into the chair. He stared at the screen, though he knew there'd be no visible response in the first pass. He'd been in tight spots, situations where he more than half expected to die within minutes. None of those times, he thought, were worse than this enforced waiting.

But by the fourth pass, the Lenj ship's image was bigger on the screen. And somehow the time came when he turned off all gravity, suited up and went outside.

## V

The Lenj ship seemed to creep slowly toward him. Instinct said, "Now!"

He turned on the suit's drive, felt the bootsoles press against his braced feet, saw *Wargentin* drop from beneath him. Straight out, he



drove — that was the first thing; get out there in plenty of time. Hane was behind him now, and all he saw was the Lenj ship, against a starfield, seeming to grow and to tilt slowly so the stern pointed at him like a cannon coming to bear. His breath was harsh and rapid in his earphones. Was he going to overshoot? He turned off the drive; stabbed a finger at an auxiliary control to turn him head-on; saw that he wasn't badly out of line. Strange, he thought, how that monstrous gravity he couldn't even feel checked his outward drift like a chain. He was in the ship's orbit, now, following her at equal velocity. Hane swung into view ahead. He aligned himself just below the ship and toward the side where she was holed and touched his drive lightly. A minor correction took him within yards of the jagged wound. He maneuvered to face it and used a back-thrust very gingerly. He didn't want to gash the suit's plastic on some metal thorn.

He got in safely, his suit lights making weird shadows in the wrecked compartment. A hatch, leading inward, gaped open, too bent to be closed. But beyond the next compartment was a sound hatch. Once through that, he was in the ship's core, hauling himself along very slowly because the heavy fuel-cannisters attached to his suit must be coaxed, not jerked.

He knew where the converter-room would be and found it. Some of the markings he couldn't decipher, but the two charging ports were unmistakable. He moved to

them, got into the right position and turned on his suit's footing-drive to push his bootsoles against the deck. Anchored, he worked clumsily at the port covers until he got them hinged open. Now he detached a cannister from his suit, muttering profane thanks to Earth for adopting standard-size fuel bars, wrestled the cannister into position so it hung top-down before him. He unscrewed the top, then gave the cannister a sharp upward tug. It slid free, leaving the heavy bar suspended. He maneuvered that into the port and, holding himself down with one hand, shoved hard at the bar. It moved sluggishly (but with mass!) into the tube. Through his gloves, he felt the jolts as it tripped the mechanical starters, bringing standby batteries to life. He stood anxiously by watching a panel until a tiny light came on. He let out his breath in relief. The ship had power now, whatever else she might lack. He put the second bar in its port, leaving the third in a rack. "Didn't need a spare after all." He started for the control room.

He flipped master switches and studied telltale lights. The drive wasn't in working order, of course — they'd have seen to that, after parking the ship here. There was no stored air, so he'd have to stay in his suit. And the main computer wasn't working. That latter was bad; he couldn't compute the distance to Hane. He'd have to guess and send several drones (if there were any!) set for various distances and hope

one would space-in fairly close.

He studied the console lights, frowning over the alien symbols. That small bank of lights just might be. . . . He looked around, saw several closed doors, clumped over to one and opened it. Empty — a suit-storage locker. He tried another. This was the communications cubbyhole. He turned on lights. Yes! Those five small ports would be tubes leading to the drone-launching turret! Shakily, he opened one of the ports — and saw the blunt end of a message drone. He released a catch and drew it out. It was about a foot long and three inches thick, with a bulge at the middle. The drive would be there, at the center of gravity. He peered at setscrews mentally translating the Lenj calibrations into miles. Well . . . . He checked the other four ports; found drones in them. He'd send all five, set for distances ranging from twenty to thirty billion miles. If the planet didn't happen to be on the far side of Hane. . . .

He made the settings, locked all the port-covers and studied the controls again before doing anything. He ought to let the drones warm a while longer, anyway. Now — how did he feed his message in? That phone-jack might be where a microphone plugged in — but where was the mike? Hastily, clumsily, he began to search. None here. He fumbled at his suit; unreeled its extension cord; tried the plug. It didn't fit the alien jack. He clumped out to the main console, found no mikes. He went back and hauled a drone out of its nest. Was there a

panel that he could hold against the voice-vibrator of his suit helmet? No. These drones had to be fed their messages electronically. He swore and slammed the thing back into its port. Well, they'd space-in and send out their carrier-waves, and just possibly Loob Garka might hear one of them and make the right guesses. He stood in the doorway of the cubbyhole, waiting for Hane to swing into view on the main screen, then pressed the stud that sent the drones to the turret.

A needle flickered on a dial. He stared at it in dismay — he didn't have to read the alien symbols to know what it meant. A ship had spaced-in somewhat close.

Junnabl.

He waited tensely for the Hane to come into position, dead ahead, then stabbed at the firing-stud. He couldn't feel any jar, of course, as the tiny drones leaped away, but five lights blinked on a panel. Barring malfunction, they were locked on Hane now. They'd keep themselves aligned and Translocate as soon as they had velocity. He hoped their drives were strong enough to overcome the monstrous gravity behind them.

He'd done all he could. He went to the viewer, cranked it to find *Wargentin*, saw Junnabl's flagship nestled alongside her. So the pirate knew by now that Wend was gone, or would, after a hasty search of the ship. And as soon as the next pass near this Lenj ship, the whole thing would be obvious.

Wend could, of course, slip out and try to hide in space, but Jun-



nabl's radar would spot him at once. He might as well wait here. He began thinking what he'd do when they came.

Another two hours had fretted by. His suit air reeked of perspiration. A shuttleboat, with two suited figures riding piggyback, was coming cautiously toward the Lenj ship.

Wend waited, peering out one edge of the jagged hole. Gripped in his right hand was the third fuel-bar — as good a club as he'd been able to find, if unwieldy. The two suits detached themselves from the boat and closed in, separating, cautiously. Wend drew back to one side to avoid a flashlight that searched into the hole. Gripping a handhold with his left hand, he got ready to swing the fuel bar with his right.

Time passed, and the temptation was tremendous to peek out; but he resisted it. Finally the flashlight beam stabbed in at a sharp angle and wobbled around the wrecked compartment. He got the fuel-bar moving very slowly. The flashlight itself poked into the hole, and a moment later a suit blocked out the stars. He strained hard at the bar. With painful slowness, it swung around; threatened to tear itself from his gloved hand, so that he had to pull at it very hard. The flashlight beam caught it. The suited pirate went motionless, then, realizing the significance of the slow-motion swing, tried frantically to dodge. But the heavy bar moved on ponderously, sweeping him back out of the hole, sending him in a head-over-heels tumble. Wend was al-

ready moving. He launched himself out after the tumbling figure. The flashlight was spinning away uselessly; so was whatever weapon the pirate had held. Wend reached him, got behind him, waited until the balance was right and gave him a shove that sent the pirate spinning anew and Wend shooting feet-first to one side. A rupter beam slashed across the ship's hull, spilling incandescence in a shower. Wend was already curving up and around the hull, working frantically at his drive-controls to keep aligned. Another rupter beam missed him narrowly, then he was beyond the hull. He took quick evasive action, straining the suit's drive to push him outward, careful not to move retrograde to the ship because that would mean being pulled down toward the small dark gravity-monster. He got turned so he could see back. The shuttleboat was in sight, waiting for the two suited men to reach it. Junnabl's ship was headed this way. The suit radio was a clamor of harsh Kyshan oaths. Soon the radar would find him. *Well, he thought savagely, I gave it a try. And I'm not going to let them take me alive. Junnabl will never know where that cache is!*

But Junnabl — Wend saw presently — had other problems.

Missiles, ghostly in Hane's distant light, were streaking toward the pirate ship. It fought them off desperately with counter-missiles while it leaped into acceleration, out of orbit and away. More missiles pursued. But Junnabl, Wend could see, would get velocity enough to

Translocate before ever being hit.

Smaller missiles came after the shuttleboat. It veered frantically, away from them. Wend gasped, "God! Not retrograde!" But already the boat, orbital speed lost, was spiralling down, its drive vastly overworked trying to fight that gravity. It wouldn't go all the way in, of course. But the tidal forces—

He turned on his suit transmitter, then waited to get his voice under control. "Loob Garka? This is Taintless Wend. Do you hear me."

It took them minutes to make a transmission on his wavelength. "Wend? This is Loob Garka. I have a fix on you. What in hell are you doing? Trying to hijack one of my ships?"

Wend's chuckle was shaky. "I was just guarding her for you. Evidently one of those message drones was close enough."

Loob said amusedly, "You need not have wasted so many. Don't you think I have listening devices out around Hane? But you're lucky they were Lenj drones. That was the only thing that told me where they'd come from!"

## VI

The cache hadn't been hard to find, and no harder to dig up. Wend sat with Loob and with Vassun Garka, who was newly arrived from Norp. Wend asked the latter, "What did Junnabl say when he called you?"

Vassun showed his teeth. "He said he had a contract with TSF to

pick up cargo for them. He didn't mention you. I was startled, at first. But when I got your letter, I understood. Now, about this division —"

Loob interrupted, "It was a thing I don't like, your giving him Hane co-ordinates. I do not see that we are obligated to keep the agreement."

Vassun said, "We'll give you your fourth, but considering events I'm inclined to agree with Loob about the rest. Can you tell me any reason, other than you already have, why we should send half back to Terra?"

Wend tried to lie casually. "Well, no. Except that the letter I sent you wasn't the only one I sent."

Vassun considered, looking almost pleased. "Ah. And if you are not free to intercept it within a certain time, someone will open it, yes? But you could be bluffing."

Loob took a healthy swig of the refreshments and grinned. "I like a good bluff. And this Earthman is a valuable acquaintance. Let us keep the agreement."

Wend said, "Fine. And you'll make an additional profit buying my fourth from me at your usual scandalous rates. I won't find it convenient stuff to peddle around myself. I'll have to run, and fix up a new alias, since Junnabl's still alive to talk."

Loob veered at Vassun. "You see?" Then he peered at Wend. "I understand you have lost your yacht. Now I happen to have on hand a fine small ship, a rebuilt military scout. I will sell it to you at a very reasonable price." **END**

# BRIDE NINETY-ONE

by ROBERT SILVERBERG

*She was a typical blushing  
bride — though she blushed  
into the far ultraviolet!*

**I**t was a standard six-month marriage contract. I signed it, and Landy signed it, and we were man and wife, for the time being. The registrar clicked and chattered and disgorged our license. My friends grinned and slapped me on the back and bellowed congratulations. Five of Landy's sisters giggled and hummed and went through complete spectral changes. We were all very happy.

"Kiss the bride!" cried my friends and her sisters.

Landy slipped into my arms. It was a good fit; she was pliable and slender, and I engulfed her, and the petals of her ingestion-slot fluttered prettily as I pressed my lips against them. We held the pose for maybe half a minute. Give her credit; she didn't flinch. On Landy's world they don't kiss, not with their mouths,

at least; and I doubt that she enjoyed the experience much. But by the terms of our marriage contract we were following Terran mores. That has to be decided in advance, in these interworld marriages. And here we kiss the bride; so I kissed the bride. My pal Jim Owens got carried away and scooped up one of Landy's sisters and kissed *her*. She gave him a shove in the chest that knocked him across the chapel. It wasn't her wedding, after all.

The ceremony was over, and we had our cake and hallucinogens; and about midnight someone said, "We ought to give the honeymooners some privacy."

So they all cleared out, and Landy and I started our wedding night.

**W**e waited until they were gone. Then we took the back exit

from the chapel and got into a transport capsule for two, very snug, Landy's sweet molasses fragrance pungent in my nostrils, her flexible limbs coiled against mine.

I nudged a stud, and we went floating down Harriman Channel at three hundred kilometers an hour. The eddy currents weren't bad, and we loved the ride. She kissed me again; she was learning our ways fast. In fifteen minutes we reached our programmed destination, and the capsule took a quick left turn, squirted through an access sphincter and fastened itself to the puckered skin of our hotel. The nose of the capsule produced the desired degree of irritation; the skin opened, and we shot into the building. I opened the capsule and helped Landy out, inside our room. Her soft golden eyes were shimmering with merriment and joy. I slapped a privacy seal on the wall-filters.

"I love you," she said in more-or-less English.

"I love you," I told her in her own language.

She pouted at me. "This is a Terran marriage, remember?"

"So it is. So it is. Champagne and caviar?"

"Of course."

I programmed for it, and the snack came rolling out of the storage unit, ice-cold and inviting. I popped the cork and sprinkled lemon juice on the caviar, and we dined. Fish eggs and overripe grape juice, nothing more, I reminded myself.

After that we activated the periscope stack and stared up through a hundred storeys of hotel at the

stars. There was a lover's moon in the sky that night, and also one of the cartels had strung a row of beady jewels across about twenty degrees of arc, as though purely for our pleasure. We held hands and watched.

After that we dissolved our wedding clothes.

And after that we consummated our marriage.

You don't think I'm going to tell you about *that*, do you? Some things are still sacred, even now. If you want to find out how to make love to a Suvornese, do as I did and marry one. But I'll give you a few hints about what it's like. Anatomically, it's homologous to the process customary on Terra, so far as the relative roles of male and female go. That is, man gives, woman receives, in essence. But there are differences, of course. Why marry an alien, otherwise?

I confess I was nervous, although this was my ninety-first wedding night. I had never married a Suvornese before. I hadn't been to bed with one, either, and if you stop to reflect a little on Suvornese ethical practices you'll see what a damn-fool suggestion that was. I had studied a Suvornese marriage manual, but as any adolescent on any world quickly realizes, translating words and tridim prints into action is trickier than it seems, the first time.

Landy was very helpful, though. She knew no more about Terran males than I did about Suvornese females, of course; but she was eager to learn and eager to see that I did

all the right things. So we managed excellently well. There's a knack to it. Some men have it, some don't. I do.

The next morning we breakfasted on a sun-washed terrace overlooking a turquoise pool of dancing amoeboids, and later in the day we checked out and capsuled down to the spaceport to begin our wedding journey.

"Happy?" I asked my bride.

"Very," she said. "You're my favorite husband already."

"Were any of the others Terrans?"

"No, of course not."

I smiled. A husband likes to know he's been the first.

At the spaceport, Landy signed the manifest as Mrs. Paul Clay, which gave me great pleasure, and I signed beside her, and they scanned us and let us go aboard. The ship personnel beamed at us in delight. A handsome indigo-skinned girl showed us to our cabin and wished us a good trip so amiably that I tried to tip her. I caught her credit-counter as she passed me and pushed the dial up a notch. She looked aghast and set it right back again. "Tipping's forbidden, sir!"

"Sorry. I got carried away."

"Your wife's so lovely. Is she Honirangi?"

"Suvornese."

"I hope you're very happy together."

**XX** We were alone again. I cuddled

Landy up against me. Inter-world marriages are all the rage nowadays, of course; but I hadn't

married Landy merely because it was a fad. I was genuinely attracted to her, and she to me. All over the galaxy people are contracting the weirdest marriages just to say that they've done it — marrying Sthenics, Gruulers, even Hhinamor. Really grotesque couplings. I don't say that the prime purpose of a marriage is sex, or that you necessarily have to marry a member of a species with which a physical relationship is easy to maintain. But there ought to be some kind of warmth in a marriage. How can you feel real love for a Hhinamor wife who is actually seven pale blue reptiles permanently enclosed in an argon atmosphere? At least Landy was mammalian and humanoid. A Suvornese-Terran mating would of course be infertile, but I am a conventional sort of person at heart and try to avoid committing abominations; I am quite willing to leave the task of continuing the species to those whose job is reproduction, and you can be sure that even if our chromosomes were mutually congruent I would never have brought the disgusting subject up with Landy. Marriage is marriage, reproduction is reproduction, and what does one have to do with the other, anyway?

During the six subjective weeks of our journey, we amused ourselves in various ways aboard the ship. We made love a good deal, of course. We went gravity-swimming and played paddle-polo in the star lounge. We introduced ourselves to other newlywed couples and to a newly wed super-couple consisting of three Banamons and a pair of Ghinoi.

And also Landy had her teeth transplanted, as a special surprise for me.

Suvornese have teeth, but they are not like Terran teeth, as why should they be? They are elegant little spiny needles mounted on rotating bases, which a Suvornese uses to impale his food while he rasps at it from the rear with his tongue. In terms of Suvornese needs they are quite functional, and in the context of her species Landy's teeth were remarkably attractive, I thought. I didn't want her to change them. But she must have picked up some subtle hint that I found her teeth anti-erotic, or something. Perhaps I was radiating an underlying dislike for that alien dental arrangement of hers even while I was telling myself on the conscious level that they were lovely. So she went to the ship's surgeon and got herself a mouthful of Terran teeth.

I didn't know where she went. She vanished after breakfast, telling me she had something important to attend to. All in ignorance, I donned gills and went for a swim while Landy surrendered her pretty teeth to the surgeon. He cleaned out the sockets and implanted a rooting layer of analogous gum-tissue. He chiseled new receptor sockets in this synthetic implant. He drill-tailored a set of donor teeth to fit and slipped them into the periodontal membranes and bonded them with a quick jab of homografting cement. The entire process took less than two hours. When Landy returned to me, the band of color-variable skin across her forehead was way up

toward the violet, indicating considerable emotional disturbance; and I felt a little edgy about it.

She smiled. She drew back the petals of her ingestion-slot. She showed me her new teeth.

“Landy! What the hell —!” Before I could check myself, I was registering shock and dismay from every pore. And Landy registered dismay at my dismay. Her forehead shot clear past the visible spectrum, bathing me in a lot of ultraviolet that distressed me even though I couldn't see it, and her petals drooped and her eyes glistened and her nostrils clamped together.

“You don't like them?” she asked.

“I didn't expect — you took me my surprise — ”

“I did it for you!”

“But I liked your old teeth,” I protested.

“No. Not really. You were afraid of them. I know how a Terran kisses. You never kissed me like that. Now I have beautiful teeth. Kiss me, Paul.”

She trembled in my arms. I kissed her.

We were having our first emotional crisis. She had done this crazy thing with her teeth purely to please me, and I wasn't pleased, and now she was upset. I did all the things I could to soothe her, short of telling her to go back and get her old teeth again. Somehow that would have made matters worse.

I had a hard time getting used to Landy with Terran choppers in her dainty little mouth. She had re-

ceived a flawless set, of course, two gleaming ivory rows; but they looked incongruous in her ingestion slot, and I had to fight to keep from reacting negatively every time she opened her mouth. When a man buys an old Gothic cathedral, he doesn't want an architect to trick it up with wiggling bioplast inserts around the spire. And when a man marries a Suvornese, he doesn't want her to turn herself piecemeal into a Terran. Where would it end? Would Landy now decorate herself with a synthetic navel and have her breasts shifted about and —

Well, she didn't. She wore her Terran teeth for about ten ship-board days, and neither of us took any overt notice of them, and then very quietly she went back to the surgeon and had him give her a set of Suvornese dentals again. It was only money, I told myself. I didn't make any reference to the switch, hoping to treat the episode as a temporary aberration that now was ended. Somehow I got the feeling that Landy still thought she *ought* to have Terran teeth. But we never discussed it, and I was happy to see her looking Suvornese again.

**Y**ou see how it is, with marriage? Two people try to please one another, and they don't always succeed, and sometimes they even hurt one another in the very attempt to please. That's how it was with Landy and me. But we were mature enough to survive the great tooth crisis. If this had been, say, my tenth or eleventh marriage, it might have been a disaster. One learns

how to avoid the pitfalls as one gains experience.

We mingled a good deal with our fellow passengers. If we needed lessons in how not to conduct a marriage, they were easily available. The cabin next to ours was occupied by another mixed couple, which was excuse enough for us to spend some time with them; but very quickly we realized that we didn't relish their company. They were both playing for a bond forfeiture — a very ugly scene, let me tell you.

The woman was Terran — a big, voluptuous sort with orange hair and speckled eyeballs. Her name was Marje. Her new husband was a Lanamorian, a hulking ox of a humanoid with corrugated blue skin, four telescopic arms and a tripod deal for legs. At first they seemed likeable enough, both on the flighty side, interstellar tourists who had been everywhere and done everything and now were settling down for six months of bliss. But very shortly I noticed that they spoke sharply, even cruelly, to one another in front of strangers. They were out to wound.

You know how it is with the six-month marriage contract, don't you? Each party posts a desertion bond. If the other fails to go the route and walks out before the legal dissolution date, the bond is forfeited. Now, it's not all that hard to stay married for six months, and the bondsmen rarely have to pay off; we are a mature civilization. Such early abuses of the system as conspiring to have one party desert, and then splitting the forfeiture later,

have long since become extinct.

But Marje and her Lanamorian mate were both hard up for cash. Each was hot for the forfeiture, and each was working like a demon to outdo the other in obnoxiousness, hoping to break up the marriage fast. When I saw what was going on, I suggested to Landy that we look for friends elsewhere on the ship.

Which led to our second emotional crisis.

As part of their campaign of mutual repulsion, Marje and hubby decided to enliven their marriage with a spot of infidelity. I take a very old-fashioned view of the marriage vow, you understand. I regard myself as bound to love, honor and obey for six months, with no fooling around on the side; if a man can't stay monogamous through an entire marriage, he ought to get a spine implant. I assumed that Landy felt the same way. I was wrong.

We were in the ship's lounge, the four of us, getting high on direct jolts of fusel oils and stray esters, when Marje made a pass at me. She was not subtle. She deopaqued her clothes, waved yards of bosom in my face and said, "There's a nice wide bed in our cabin, sweetheart."

"It isn't bedtime," I told her.

"It could be."

"No."

"Be a friend in need, Paulsie. This monster's been crawling all over me for weeks. I want a Terran to love me."

"The ship is full of available Terrans, Marje."

"I want you."

"I'm not available."

"Cut it out! You mean to say you won't do a fellow Terran a little favor?" She stood up, quivering, bare flesh erupting all over the place. In scabrously explicit terms she described her intimacies with the Lanamorian and begged me to give her an hour of more conventional pleasure. I was steadfast. Perhaps, she suggested, I would tape a simulacrum and send that to her bed? No, not even that, I said.

At length Marje got angry with me for turning her down. I suppose she could be legitimately annoyed at my lack of chivalry, and if I hadn't happened to be married at the moment I would gladly have obliged her; but as it was I couldn't do a thing for her, and she was boiling. She dumped a drink in my face and stalked out of the lounge, and in a few moments the Lanamorian followed her.

I looked at Landy, whom I had carefully avoided during the whole embarrassing colloquy. Her forehead was sagging close to infrared, which is to say, in effect, that she was almost in tears.

"You don't love me," she said.

"What?"

"If you loved me you'd have gone with her."

"Is that some kind of Suvornese marriage custom?"

"Of course not," she snuffled. "We're married under Terran mores. It's a Terran marriage custom."

"What gives you the idea that —"

"Terran men are unfaithful to their wives. I know. I've read about



it. Any husband who cares about his wife at all cheats her now and then. But you — ”

“You’ve got things mixed up,” I said.

“I don’t! I don’t!” And she neared tantrum stage. Gently I tried to tell her that she had been reading too many historical novels, that adultery was very much out of fashion, that by turning Marje down I was demonstrating the solidity of my love for my wife. Landy wouldn’t buy it. She got more and more confused and angry, huddling into herself and quivering in misery. I consoled her in all the ways I could imagine. Gradually she became tranquil again, but she stayed moody. I began to see that marrying an alien had its complexities.

Two days later, Marje’s husband made a pass at her.

I missed the preliminary phases. A swarm of energy globes had encountered the ship, and I was up at the view-wall with most of the other passengers, watching the graceful gyrations of these denizens of hyperspace. Landy was with me at first; but she had seen energy globes so often that they bored her, and so she told me she was going down to the scintillation tank for a while, as long as everyone was up here. I said I’d meet her there later. Eventually I did. There were about a dozen beings in the tank, making sparkling blue tracks through the radiant greenish-gold fluid. I stood by the edge, looking for Landy, but there was no one of her general physique below me.

And then I saw her. She was nude and dripping polychrome fluid, so she must have come from the tank only a few moments before. The hulking Lanamorian was beside her and clearly trying to molest her. He was pawing her in various ways, and Landy’s spectrum was showing obvious distress.

Hubby to the rescue, naturally. But I wasn’t needed.

Do you get from this tale an image of Landy as being frail, doll-like, something of porcelain? She was, you know. Scarcely forty kilograms of woman there, and not a bone in her body as we understand bone — merely cartilage. And shy, sensitive, easily set aflutter by an unkind word or a misconstrued nuance. Altogether in need of husbandly protection at all times. Yes? No. Sharks, like Suvornese, have only gristle in place of bone, but forty kilograms of shark do not normally require aid in looking after themselves, and neither did Landy.

Suvornese are agile, well coordinated, fast-moving and stronger than they look, as Jim Owens found out at my wedding when he kissed Landy’s sister. The Lanamorian found it out, too. Between the time I spied him bothering Landy and the time I reached her side, she had dislocated three of his arms and flipped him on his massive back, where he lay flexing his tripod supports and groaning. Landy, looking sleek and pleased with herself, kissed me.

“What happened?” I asked.

“He made an obscene proposition.”

"You really ruined him, Landy."  
"He made me terribly angry," she said, although she no longer looked or sounded very angry.

I said, "Wasn't it just the other day that you were telling me I didn't love you because I turned down Marje's obscene proposition? You aren't consistent, Landy. If you think that infidelity is essential to a Terran-mores marriage, you should have given in to him, yes?"

"Terran husbands are unfaithful. Terran wives must be chaste. It is known as the double standard."

"The what?"

"The double standard," she repeated, and she began to explain it to me. I listened for a while, then started to laugh at her sweetly innocent words.

"You're cute," I told her.

"You're terrible. What kind of a woman do you think I am? How dare you encourage me to be unfaithful?"

"Landy, I —"

She didn't listen. She stomped away, and we were having our third emotional crisis. Poor Landy was determined to run a Terran-mores marriage in what she considered the proper fashion, and she took bright cerise umbrage when I demurred. For the rest of the week she was cool to me, and even after we had made up, things never seemed quite the same as before. A gulf was widening between us — or rather, the gulf had been there all along, and it was becoming harder for us to pretend it didn't exist.

After six weeks of these annoying misunderstandings, we landed.

Our destination was Thalia, the honeymoon planet. I had spent half a dozen earlier honeymoons there; but Landy had never seen it, so I had signed up for another visit. Thalia, you know, is a good-sized planet, about one and a half Earths in mass, density and gravitation, with a couple of colorful moons that might almost have been designed for lovers, since they're visible day and night. The sky is light green, the vegetation runs heavily to a high-tannin orange-yellow, and the air is as bracing as nutmeg.

The place is owned by a cartel that mines prealloyed metals on the dry northern continent, extracts power cores in the eastern lobe of what once was a tropical forest and is now a giant slab of laterite and, on a half-sized continent in the western ocean, operates a giant resort for newlyweds. It's more or less of a galactic dude ranch; the staff is largely Terran, and the clientele comes from all over the cosmos. You can do wonders with an uninhabited habitable planet, if you grab it with the right kind of lease.

Landy and I were still on the chilly side when we left the starship and were catapulted in a grease-flask to our honeymoon cabin. But she warmed immediately to the charm of the environment. We had been placed in a floating monomolecular balloon, anchored a hundred meters above the main house. It was total isolation, as most honeymooners crave. (I know there are exceptions.)

We worked hard at enjoying our stay on Thalia.

We let ourselves be plugged into a pterodactyl kite that took us on a tour of the entire continent. We sipped radon cocktails at a get-together party. We munched algae steaks over a crackling fire. We swam. We hunted. We fished. We made love. We lolled under the friendly sun until my skin grew copper-colored and Landy's turned the color of fine oxblood porcelain, strictly from Kang-hsi. We had a splendid time, despite the spreading network of tensions that were coming to underlie our relationship like an interweave of metallic filaments.

Until the bronco got loose, everything went well.

It wasn't exactly a bronco. It was a Vesilian quadruped of vast size, blue with orange stripes, a thick murderous tail, a fierce set of teeth — two tons, more or less, of vicious wild animal. They kept it in a corral back of one of the proton wells, and from time to time members of the staff dressed up as cowpokes and staged impromptu rodeos for the guests. It was impossible to break the beast, and no one had stayed aboard it for more than about ten seconds. There had been fatalities, and at least one hand had been mashed so badly that he couldn't be returned to life; they simply didn't have enough tissue to put into the centrifuge.

Landy was fascinated by the animal. Don't ask me why. She hauled me to the corral whenever an exhibition was announced and stood in rapture while the cowpokes were whirled around. She was right be-

side the fence the day the beast threw a rider, kicked over the traces, ripped free of its handlers and headed for the wide open spaces.

"Kill it!" people began to scream.

But no one was armed except the cowpokes, and they were in varying stages of disarray and destruction that left them incapable of doing anything useful. The quadruped cleared the corral in a nicely timed leap, paused to kick over a sapling, bounded a couple of dozen meters and halted, pawing the ground and wondering what to do next. It looked hungry. It looked mean.

Confronting it were some fifty young husbands who, if they wanted a chance to show their brides what great heroes they were, had the opportunity of a lifetime. They merely had to grab a sizzler from one of the fallen hands and drill the creature before it chewed up the whole hotel.

There were no candidates for heroism. All the husbands ran. Some of them grabbed their wives; most did not. I was planning to run, too, but I'll say this in my favor: I intended to take care of Landy. I looked around for her, failed for a moment to find her and then observed her in the vicinity of the snorting beast. She seized a rope dangling from its haunches and pulled herself up, planting herself behind its mane. The beast reared and stamped. Landy clung, looking like a child on that massive back. She slid forward. She touched her ingestion slot to the animal's skin. I visualized dozens of tiny needles brushing across that impervious hide.

The animal neighed more or less,

relaxed and meekly trotted back to the corral. Landy persuaded it to jump over the fence. A moment later the startled cowhands, those who were able to function, tethered the thing securely. Landy descended.

"When I was a child I rode such an animal every day," she explained gravely to me. "I know how to handle them. They were less fierce than they look. And, oh, it was so good to be on one again!"

"Landy," I said.

"You look angry."

"Landy, that was a crazy thing to do. You could have been killed!"

"Oh, no, not a chance." Her spectrum began to flicker toward the extremes, though. "There was no risk. It's lucky I had my real teeth, though, or —"

I was close to collapse, a delayed reaction. "*Don't ever do a thing like that again, Landy.*"

Softly she said, "Why are you so angry? Oh, yes, I know. Among Terrans, the wife does not do such things. It was the man's role I played, yes? Forgive me? Forgive me?"

I forgave her. But it took three hours of steady talking to work out all the complex moral problems of the situation. We ended up by agreeing that if the same thing ever happened again, Landy would let me soothe the beast.

**I**t didn't kill me. I lived through the honeymoon and happily ever after. The six months elapsed; our posted bonds were redeemed, and our marriage was automatically terminated. Then, the instant we were single again, Landy turned to

me and sweetly uttered the most shocking proposal I have ever heard.

"Marry me again," she said.

We do not do such things. Six-month liaisons are of their very nature transient, and when they end, they end. I loved Landy dearly, but I was shaken by what she had suggested. However, she explained what she had in mind, and I listened with growing sympathy, and in the end we went before the registrar and executed a new six-month contract.

But this time we agreed to abide by Suvornese and not Terran mores. So the two marriages aren't really consecutive in spirit, though they are in elapsed time. And Suvornese marriage is very different from marriage Terran style.

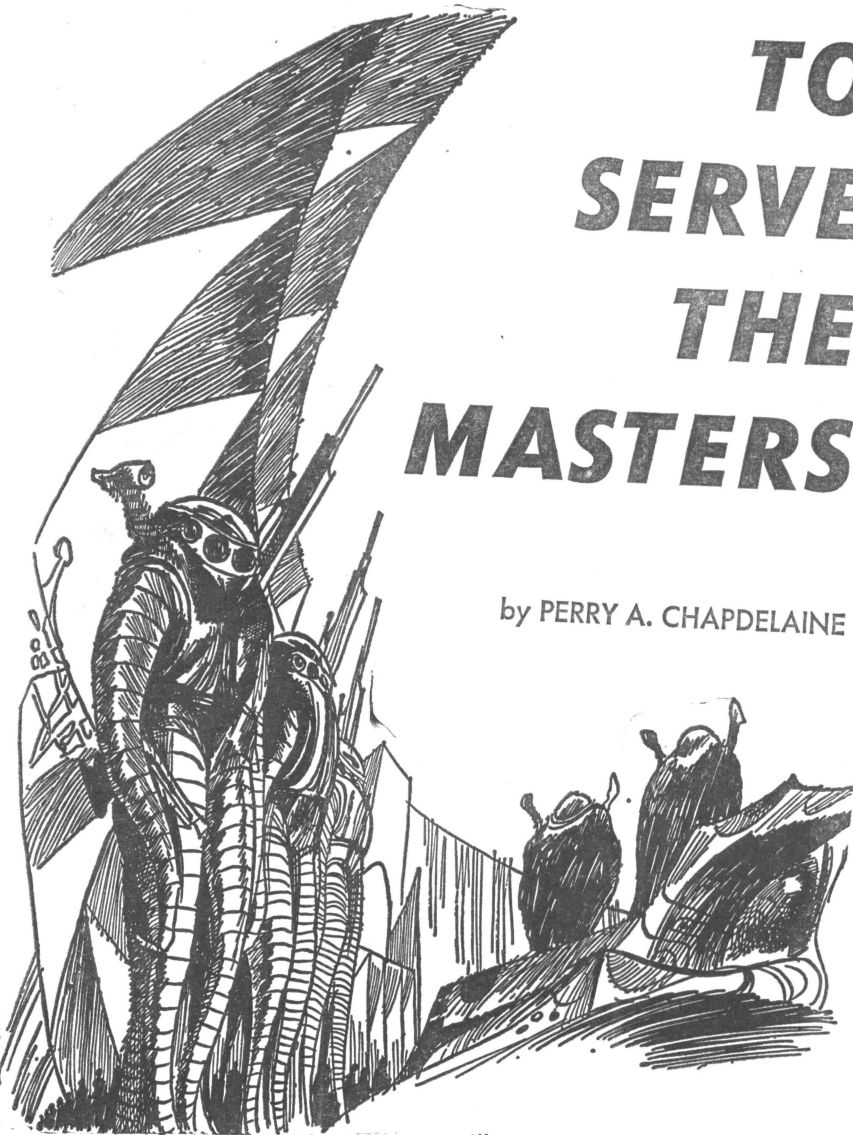
How?

I'll know more about that a few months from now. Landy and I leave for Suvorna tomorrow. I have had my teeth fixed to please her, and it's quite strange walking around with a mouthful of tiny needles, but I imagine I'll adapt. One has to put up with little inconveniences in the give-and-take of marriage. Landy's five sisters are returning to their native world with us. Eleven more sisters are there already. Under Suvornese custom I'm married to all seventeen of them at once, regardless of any other affiliations they may have contracted.

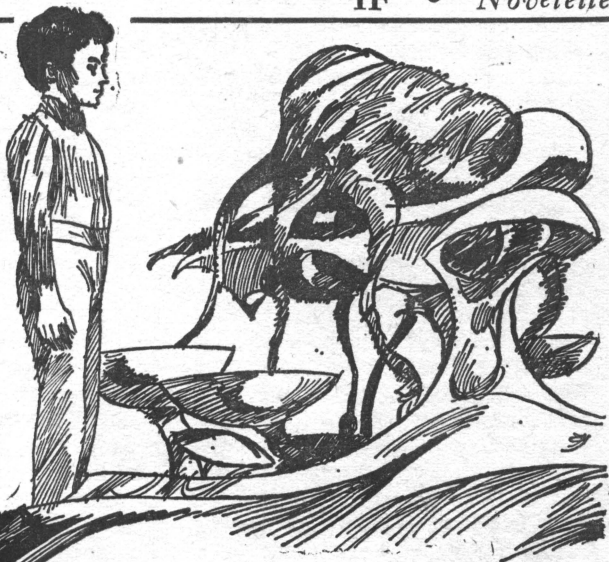
So Bride Ninety-one is also Bride Ninety-two for me, and there'll be seventeen of her all at once, dainty, molasses-flavored, golden-eyed and sleek. I'm in no position right now to predict what this marriage is going to be like. . . . END

# TO SERVE THE MASTERS

by PERRY A. CHAPDELAIN



Illustrated by GAUGHAN



*The Masters owned us all, body  
and soul — and what intelligent  
person would want it otherwise?*

I

I could not have written this record six months ago. Our posterity will need it to explain both the new and evolving species of this planet, Ed, as well as the tremendous dispersion of human and alien life forms to be found throughout such a wide volume of the cosmos.

I am not a Grammer, yet I am telling this story. I am not History,

yet I will make and form meaning as the Histories do. I am a Genetic. And this means that I was bred to be genius in the specialized field of basic life components. Where the Grammers are genius at communications and the Histories are genius at putting together the important parts of the past, I can put together the molecules required to build nearly any life variant which might be desired by our Masters. Except for

events unforeseen by the Masters, I would be genetically incapable of telling this history!

In the dim past, beyond the normal scrutiny of the Histories, the Master race somehow became a party to the engineering of space travel. The Histories say that the Masters could not have developed space engineering themselves. Perhaps some other form, either common or alien to their world of origin, unavoidably gave the Master race this tool for deep space travel. Subsequently, for countless thousands of years the Masters spread throughout the stars, absorbing all usable life forms into their system of vassalage. Now — and perhaps always — the Masters feel that all of space and all of life is their proper domain and servant, respectively.

To a Genetic like myself there is no mystery as to how and why the Master could dominate any life form. Each Master has a thin but tough integument covered by minute specialized organelles spaced in a latticelike network. These molecular groupings are spaced in a linked receiving and sending sensory-system network capable of one peculiar property of activity. The network can perceive (or sense) the *basic purpose* of any living entity constructed of matter. I don't mean that the Masters are mind readers, or that they can "tune in" on an individual life form and know what that individual is going to do the next instant. Their sensing apparatus is far cruder than that. But, in a way, the end results are just as spectacular. Masters *know* beyond any

reasonable doubt exactly what each individual life is potentially capable of doing. Any life group, or individual life form, which the Master "reads" to have the *potential of killing* a Master is simply killed by the Master. Histories tell that even yet, at the borders of the Masters' domain, entities are discovered and killed by the trillions.

In rare instances, the Masters will select a relatively undifferentiated race such as our human race and pass all members before a board of selectors. Each individual is screened for potential harm to the Master race. If the potential is low, that individual is retained under strict security guard to be used as a breeder. In turn, his or her offspring are reviewed by a board. This process continues for many generations until a perfectly satisfactory human has been genetically produced.

Since direct sensory knowledge of the genetic purpose of each individual is always known to the Master, individuals are bred to be loyal and to be highly specialized in a useful area of service.

If I were to include a list of the chief characteristics to be found in the Master race I would not include intelligence. Highest on the list would be a characteristic of survival. Domesticated races of many kinds accomplish *all* of the Master's work — his thinking, his exploration, his fighting, his invention, his every mode of living. The Master's only work consists of screening races or individual members of races. Their loyal servants do all else.

We domesticates are incapable of

even the thought of disloyalty. Would a meat animal, bred for 100 generations for the traits of docility and tender meat, connive and scheme toward the day of freedom? Perhaps one of its early ancestors might have sought freedom. But his "freedom" genes have long been eliminated from his progeny. So it was with each of us, no matter the star of our origin. We are incapable of disloyal thoughts or actions toward our Masters. We are capable, sometimes unusually so, in the field of work for which we were bred. I am bred for and trained to be genius Genetic!

## II

My first memory occurred at the age of two. I looked around the bright orange cubicle containing the usual assortment of human training toys when my sight caught and clung to the three-dimensional chromosomal model. I remember thinking that the energy form containing fifteen energy levels was placed in the wrong model. I screamed because I wanted to change its position.

It wasn't a question of symmetry. It was a question of "rightness" and my subjective need to restore something which was clearly not of nature. The Mothers, who are usually very good about changing wet pants and other normal biological needs, were just not capable of satisfying my difficulty on that day. The Mothers had their own specialty and could not have dreamed that moving a phosphorus atom on a three-

dimensional model would stop a two-year-old from screaming. I shall never forget that day. It was my unhappiest!

Soon thereafter the Teachers entered my life. Among the many things I learned were certain facts of my own life. I was 205th screened generation. I was the penultimate of many important human lines bred to be key research and development scientists in the field of genetics.

Since research in genetics required knowledge of all of the sciences, I was rigidly instructed in every area. But the penalty of being bred with such exceptional talents as mine was similar to penalties intrinsic to all of the Masters' vassals. Since I was not bred to be Grammer, I became confused, illogical and poor of memory whenever I tried to discuss any subject other than my own. Conversely, any subject bordering or merely symbolized within my field of competence provided a tapestry against which my brilliance could weave endless diagrams of beauty. For that is what I was bred to be — genetic genius for the research and development of other domesticates for the Masters.

My teachers were the experts they had been bred to be. They started my learning process too early for me to say that at such and such a date I began my education. Learning was a full time awake activity for me. I had no way at all of knowing whether my regime was harder or easier than any other training program — for mine was designed solely for me, and I was the only pupil within the program.



**I**ll not forget the day when Teacher of Biologies had programmed the multisensory learning computer for genetics of an advanced nature. The course consisted of placing all known facts about genetics into the computer, along with all of the logical relations and functional relations which would tie the facts together. The student is then asked to simulate experiments by symbolic processes which the computer assesses against its tautological structure. If the student is wrong, the computer is supposed to signal this fact to the student as well as to explain the error. If the student is right, the computer determines all of the important ramifications of the simulated experiment and rewards the student by presenting a realistic but simulated model of his successful experiment in three-dimensional color vision.

Now, I had always been curious about the structure of organelles which could provide an apparatus capable of sensing the structure and function of other organelles. I set up my symbolic experiment and pushed the appropriate computer keys. The logical extrapolation which was presented to me in full color as my reward for selecting the correct postulates and ingredients was that of one of the Master race.

At the same time, the experiment "halt" light came on, and the computer carefully explained to me that the experiment was incapable of being performed due to my logical inconsistencies. From this day I knew that the current logical construct of heredity was faulty admitting to con-

flicting conclusions. I knew also that I had accidentally placed my finger on the key difference between the Master race and other life forms!

My education progressed rather well, without significant difference between mine and that received by other "professional" categories. Factual knowledge was easy to absorb both by reason of my birthright and because of the chemical and mechanical aids to learning. I explored the byways and pathways of allied fields of knowledge but, whenever my life required any form of communication outside of genetic or genetic related problems, I generally depended upon the Grammers. They couldn't understand, but they could communicate very well.

Not until my period of advanced training was begun did further important knowledge regarding Masters come to me.

### III

**T**he day I was discharged from the Teacher cubicle my advanced training began.

My world had consisted chiefly of sleeping, eating and learning. Learning consisted of guidance by teachers and manipulation of the large multisensory learning computer. Facts about the outside world were known only at second-hand. Exposure to the outside world under Advanced Training was optional for all specialist scientists or engineers. If, for example, one were trained to study crystal-forming phenomenon, there might be no theoretical reason for the person to travel out-

side of his cubicle. If, however, problems of cosmology, no hindrance existed for the scientist to visit other planets, solar systems or whatever he pleased.

I elected, therefore, to continue my advanced study through travel. I desired to experience at first hand the result of changing ecology, to deduce at first hand the effect of star, gravity, chemical and radiation on composite and simple gene structures. I desired, too, to satisfy the increasingly driving curiosity of my maturing intellect. I was now ten years old.

Under the guidance of Teachers, with the aid of Grammers, Travel Planner specialists laid out my five-year itinerary. I was to visit at least fourteen stars of class G, M, O and A, with twenty-seven different planets to sample.

I closed the door of the Growth cubicle with a sense of relief. The robotic track car was waiting. I jumped inside and pressed the window button to anti-polarization so that I could view the scenery which had so long been denied me in person. Soon I had to admit that the sight of miles of cubelike structures without windows or decorations and an occasional robotic track car were not impressive sensory stimuli. But these, nonetheless, together with a real sky and sun, inspired me greatly at the time. Subjectively I knew that I was maturing and I was glad to be alive in the world.

Perhaps five hours were consumed in traveling to the spaceport. Other ports were closer, I was told, but the ship of my destination was there.

I grabbed my very small bag of personal belongings — a three-dimensional yellow star representing my badge of genetic servitude to the Masters and which was given to me by the head Teacher when I successfully predicted the proper genetic structure of 2000 biological organisms from a standard list of characteristics; a portable multisensory, multipurpose computer presented me on my entrance to Advanced Training and a micro-micro-computer tape containing the basic physical characteristics of every life form above level six that I would expect to meet anywhere on a broad locus surrounding my trip. I jumped from the track car and ran to the spaceport door. Inside I found the same serene environment that I had come to expect everywhere in my short life. Several humans were standing around holding blue or green tags which identified their purpose in life. The blue was a Personal Attendant to a Master. The green was a Master Carrier. I knew when I saw these two colors that a Master must be near by. I strained my neck to peer in every corner, hoping to see one, but no such luck was mine that day.

Disappointed, I began the long walk around the paneled walkway searching for a Grammer. I held my yellow star proudly before me so that all would know that I was Genetic.

I passed many sliding doors before I came to the rainbow color of the Grammer. I walked in without hesitation and found the Grammer

right where he belonged. He must have been nearly seventy-five years old, yet his keen eyes followed his nose directly to my yellow star and down again to his desk where, with an affirmative nod, he checked a printed travel list.

"I don't have a Guider available to show you the remaining way to your ship," he said, "but I can draw you a map in genetic code which will be easy for you to follow. Is that all right?"

I felt the tightening in my throat muscles that always preceded attempts to convey ideas beyond my specialty. My mind raced through at least 3000 permutations of the DNA molecule, but I still could not find a key which could be used to communicate the idea of "yes." My tongue became dry; my hands began to sweat. The harder I tried, the tighter my teeth were held together. I strained and tortured my thinking to no avail.

Finally, noting my difficulty — and possibly expecting it — the Grammer spoke again. "If you approve, give me the number of regular solids which can be used to fill all of space without overlap and without leaving a hole of any size. If you do not approve, tell me the number of heavy-atom isotopes required to build the sprassey acid molecule."

My mind clarified instantly and flung itself to the five Platonian solids. I was in control of me again! "Five," I said. In spite of the fact that I knew that the Grammer had memorized key statements of this sort so that he could communicate

with specialists like me and that he didn't have the vaguest idea what he was talking about, I felt relieved for the presence of a person with such obvious empathy. Yet I felt superior to him on this one point. For nearly 8000 years, since the time of Pythagoras around 500 B.C., man has known of the five regular polyhedrons.

The Grammer nodded his head again and proceeded to sketch out symbols on a piece of plastic board. I watched and saw a swift-forming diagram of an unknown — at least unknown to me — molecule of very little complexity. The hydrogen atom occurred only once. Interlocking energy bonds were used to depict hallways and branches. The normal energy nucleus was depicted in three dimensions. It had been so long since I had used only three dimensions in depicting molecules that I felt somewhat lost. Suddenly, however, I recognized that the hydrogen atom was my goal and the nitrogen atom which was depicted as being in a single state of excitement was our present location. This was a map which I could follow!

Once I was settled in the rocket cubicle assigned to me I reached almost instinctively for my computer. I knew this was a foolish idea but I just had to satisfy my curiosity as to whether or not the old Grammer's genetic roadmap was a permissible molecule within the energy ranges permitted for life. I inserted his specifications in the computer and found, not too surprisingly, that the probability of such a molecule

existing at all was about equal to the probability of ordinary drinking water being generated in the interior of a G type star, by the glass full — in the glass container! Still, I had had to know.

Since my cubicle was bare of any forms of intellectually satisfying implements, I was soon faced with the prospect of staring at my walls, concentrating on a problem of my own invention, or reviewing details of life as recorded in my micro-micro-computer tape. I suspect that the number of life forms recorded in considerable detail on this tape amounted to nearly  $5 \times 10^6$ . Its cross-indexing feature was likely to fill up about the same length of tape as the primary data.

This time, I randomly requested any form of life to be found in the constellation of Canes Venatici. The planet to which I was assigned in this region of space was known as Stian of a star called Etry. The randomly selected planet from the same constellation was known as Vanatta of the star Uni. The tape didn't contain the source history of the names. But no matter; the life form was interesting in itself.

Vanatta life seemed to be pre-dictated upon the replicative principle that "life comes in threes." For some reason yet to be discovered, each genetic pattern replicated itself three times. The consequences were not entirely predictable. In certain cases, where the life level was equivalent to one-celled life on Earth — life level twenty — a kind of amorphous "soup" was described. Whereas, for level six and our equivalent

of mammals, life replicated in "threes" in a very odd way. There were six life forms superficially similar and which seemed to produce a set of mammal-like forms numbering twenty-seven different shapes, sizes and varieties. Yet, and here was the real oddity, any combination of three mammals — the "original" six or the total twenty-seven superficially distinct — could interbreed and produce, at random it would seem, any one of the other twenty-seven or "original" similar six. No one had yet untangled the reason for this phenomenon.

Whenever the life form was removed from influence of its sun, it died. Evidently the relationship with their sun was sensitive; yet nothing about the sun's output could be determined to be peculiar.

I was about to request information on the composition of the sun, the planet's atmosphere, density, radiation distribution and chemical distribution when a spiderylike Antarean poked its leathery head in my doorway.

**B**red for space, the Antareans were the Masters' space servant. The Antarean generally knew everything there was to know about space travel and problems. Some Histories seemed to think that they were the original discoverers of contiguous space — such discovery having led to their absorption into the symbiote pool for the benefit of Masters.

Like all Masters' ships, we were outfitted with several forms of propulsion systems. Some forms took advantage of the "equal and opposite

reaction." Others were concerned with travel in special spaces. Polarity problems, gravity problems and mass problems each had their special tool of propulsion. For star travel, however, the Antarean established one-to-one correspondence with a contained energy system which mirrored the stress and strains of space. By some sort of multi-levelled logic, beyond my genetic background to comprehend, they created themselves — that is, the ship — in several places at the same time. Symbolically it was something like, "If I am not there<sub>1</sub>, there<sub>2</sub>, there<sub>4</sub>, . . . , there<sub>n</sub>." By making *n* large enough and tying each "there<sub>1</sub>" to the mirrored energy system, the ship was certain to be at the location desired as well as many other places. Then, by applying a limited contrapositive to the animated hypothesis, one arrived where one wished to be. That is, "If I am not there<sub>1</sub>, there<sub>2</sub>, there<sub>4</sub>, . . . there<sub>n</sub>, then I am there<sub>3</sub>."

The Antarean beckoned for me to come. I left my articles, except for my gold star, and followed.

The Antarean proceeded me into the lounge. Here I was very surprised to see, first thing, a large number of humans. I also recognized the Master Carrier and the Personal Attendant first met at the spaceport entrance. But as I walked behind the crowd, I received the greatest shock of my ten-year-old life!

There, with all orifices dangling toward the feed pan, was a live Master! Immediately upon entering the Master's presence "scanning" began. I felt, with every cell of my being,

an aliveness beyond description. It was as though each cell of me was resonating on the same frequency and as though I had become more than just me. I *knew* my basic purpose in life. I *knew* I was Genetic. And without the study of life and its endless permutations, I *knew* that life would become meaningless. I also *knew* without equivocation that Master was *Master* and I but a small, meek, propitiatory servant to the desires — any desires — of the Master. I *knew* that life could not be tolerated in any other way!

For all practical purposes the Master's scanning was continuous on each person in the room. Yet I was soon able to separate, in my mind, me from the Master.

The Master beckoned to me. With extreme feelings of joy, I complied by walking toward the Master. He bid me halt! With extreme joy, I halted. I am sure that if the Master had beckoned me to jump into open space I would have complied with equal joy.

No hypnotism was involved, nor any form of mind control. I, as well as every other being in the known volume of space occupied by the Master race, was a product of prior genetic screening. In my case, the product of 205 screenings. Life just could *not* be thought of any other way!

#### IV

Although Grammers were present, Masters had no need for their services, since they were the only untrained life form which could con-

verse equally well with all other life forms. I sensed or felt desires and impulses which at first I tended to indentify with my own personality. Very soon, however, I was able to separate out the "me" from the Master's messages.

"You are young for an advanced Genetic," he said.

His eye band, a solid circular band of light-sensitive tissue capping off the periphery of his ventral side, changed to deep green.

I made no reply, since the Master had not requested me to speak. I could not have produced any social amenities anyway.

"I selected your ancestors of the 97th screening. The male and female whose protoplasm I caused to be joined were each responsible for great services to your Masters. The female discovered biological means for increasing the diversion of genes in those egg and sperm combinations which were to be subject to later screening, which increased the probability of selecting a desirable set of traits earlier in the screening process. The male had extremely good memory. But he also had one recessive gene which was contraindicated for our purpose."

I followed the Master's discussion with great interest, for it not only blended in with my world of genetics, but it was the first bit of knowledge I had regarding my forebears.

"That male," the Master continued, "was responsible for codifying the rules of genetics in such a way that a computer could be programmed to contain the intrinsic structure of all of this science."

The Master paused to instruct the Carrier to lower him slightly, so that his sucking orifice could better reach the nutrients in the food pan.

He continued, "You used the end product of his research during most of your training cycle whenever you placed the pertinent characteristics into your computer and the computer extrapolated, by purely logical means, the result of your factors, producing therefrom a simulated life model."

My mind immediately sped back to when I discovered, by means of this very process, the basic construction common to all Masters which enabled them to dominate all other life. I began to shake with fear that my precious and somewhat accidental success would be misconstrued by the Master. Apparently, however, the Master ignored my thinking or did not "receive" it.

The Master finished sucking at the food pan and waved to be raised to a slightly higher level. Nearly facing me now, the Master continued.

"The male had to be killed, of course. The recessive gene contained elements of independence which could not be trustworthy at all times. I am sure that successive generations have eliminated undesirable traits."

As the Carrier moved forward with the Master, I was urged to follow behind. He beckoned me to a chair by a simple table and, for the first time, addressed his Personal Attendant.

"Get this male food of his kind. Also see that he has access to all parts of this ship. His mission is

valuable to the Masters. He must learn and grow so that he can better serve us. His type needs freedom to grow."

The Master turned to all with his final statement.

"Let no one hinder his learning!"

My eyes must have glowed much like the Master's own eye band. Although I was a genius Genetic, I had not really expected any kind of special treatment in life. And here, at age ten, I was addressed by a live Master and told that my "mission is valuable to the Masters." It is true that all life which survives does so only because of value to Masters, but my mission was *especially* valuable; the message implied.

For the first time in my life I wished that I could communicate to others outside of my specialty. Failing this, I mentally crosslinked about 15,000 variants of the DNA molecule. I took their naturally occurring spiral form and stretched it by means of imaginary polarity at several intermediate points along each longitudinal axis, involuted the "strings" of contact and extrapolated to 27,000 places the mutative effects I had induced upon the life forms resulting from each energy change!

The Master watched me with, I suppose, a contentment that only a Master can have for the culmination of a long, successful screening.

The Master was riding only as far as one of the planets of the star Etry. I bent to my study of life forms found in my computer tape. I felt that I was really beginning to fulfill my basic purpose in life.

Several contiguous space objectives were reached, and perhaps a day or so was spent at each place. I enjoyed meeting different life forms, but none were of particular complexity. I soon realized that those forms which I had met were logical outcomes of all I had learned from my early genetic training. I began to feel that perhaps my learning rate would not be as rapid as originally anticipated.

Meanwhile, the Antareans had prepared for our contiguous move to Stian. Since the key to application of contiguous space travel resided in how well the energy ball carried by the ship duplicated the dominant sources of energy points in space, occasionally imperfection of the mirrored universe, or unpredictable changes in the universe itself, caused the ship to arrive at some place totally unselected by anyone. The incidence of occurrence for this kind of thing is very, very low. But it happens. And for us, on this day, it happened. The Master's eye band turned bright pink. The Antareans scurried in profound study. I felt above all the hustle and bustle because any space which contained a Master was home for me.

By use of several of the propulsive devices we arrived at a planet which seemed to be adequately situated for the support of life. The difference was soon apparent, however. This planet was mostly smelly swamp. We landed on a small rising where the Master, surrounded almost entirely by Protectors, had himself carried to the edges of the swampy water. Protectors I had seen

in the ship but never with their full panoply of weapons.

I believe the Protectors are the chief race used by the Masters to fight new, unscreened life forms when needed. The Histories tell that this race had the most formidable and progressively long history of battle for survival of any race known. One look at their nearly robot-like behavior, coupled with their nearly mechanistic weapons of offense or defense, would underline this.

I wondered why the Master was studying the swamp so intently. It soon became obvious that the Master was screening every possible life form to determine if genes potentially dangerous to Masters were evident. Presumably, if such genes were available in level four or higher, this area was not yet under the sway of Masters. The first task, then, was to find level four or higher life.

The Master returned to my side and resonated,

"Go to the chief Antarean and request all pertinent data now known of this planet and its environment. If other data is needed, have it made available to you by one of the Antareans. Deduce, then, the probability of level four life and its most probable whereabouts."

The Antareans were thorough. All the information was available and neatly catalogued. I already surmised the broad features of the probable path of life on this planet, but I was glad to get the detailed data packaged with such precision by the Antareans.

I set up the proper codes on my computer and, through a half-symbiosis born of years of training, communicated with this nearly intelligent entity. Between us, the computer and I, we resolved all of the most likely patterns.

For the first time I spoke to the Master.

"There are two and only two most probable sequences of life patterns dominate in our data. They are equally obvious from gross data which surrounds us. Level four life must exist in air or in the water. Since the Antareans have successfully surveyed the whole planet prior to landing, only the later possibility can be probable."

I was confident that this had been evident to the Master from the start and so I continued.

"In the past 250,000 years, homeostatic balances have been tending toward more land and less water surface exposure. However, the rate at which the change has occurred has caused the waters to absorb a greater than usual amount of organic materials. These, in turn, have caused most all of the water to be unclear or muddy throughout the planet. If level four beings are to exist, they would not yet have been able to adapt to an environment with little or no light. They would, therefore, exist wherever the water is the clearest. Presumably along the edges of underwater currents, no matter how sluggish, level four life might be found.

"Furthermore," I continued, "they will unquestionably have some means of making light — probably



through utilization and domestication of underseas luminescent creatures. If the Antareans can make the proper chemical or infrared survey of large areas, distinguishing between the heat of planets as distinct from unusual statistical anomalies — inhomogeneities of light sources — I think you will find the life at one of these clusters."

The Antareans not only could, but did. We soon located several hundred sources of unusual light activity along the edges of underwater currents.

For the first time in my life I had been useful to a Master! My eyes danced, my steps were lighter, and I now knew what "pleasure of living" implied.

Ours was not a "contact" vessel so our mechanical probes were rather ineffective. After many trials, the Master sent several Protectors down in jury-rigged pressure suits. The Protectors, too, were eluded. Evidently only the Master, with his special sensory apparatus, could do the job.

So the Master descended with all of his Protectors. I don't know what happened down below, and neither does any one else who remained on the surface. The surviving Protector knows, but he cannot tell us anything. After about three hours of waiting at the surface of the murky water, enormous geysers shot high in the air. They could only have been caused by weapons carried by the Protector. The geysers continued for a very long time and then, suddenly, the whole surface of the water turned inky black. All of the plant

life at or near the surface of the water turned black and shriveled up on contact with whatever was coming to the top. It was like dropping acid on the leaf of a plant.

The burned, black area became larger and, near the center of the black, a Protector, holding onto the small underseas vehicle of the Master, pushed to the surface in great haste. I could see the outer suit of the Protector becoming charred and black while, with great anxiety, I watched until I saw a small feeding orifice drop through a pitted hole in the Master's craft.

We were all thankful that the Master's life had been spared. The Master stayed in a state of extreme terror for nearly forty-five days before ship life returned to normal. We orbited around the swampy planet for the whole period, waiting for rational directions. Whenever the Master left his cubicle he always had his remaining Protector near him. He also very carefully avoided any reference to his experience.

The Master called in the chief Antarean and asked him, directly, the best way to return to our portion of the universe. The Antarean's answer was immediate. It seems that any space-exploring vehicle faces the same problem in greater or lesser detail. An application of the inverse to the contra-positive gave, "If I am there<sub>3</sub>, then I am not there<sub>1</sub>, there<sub>2</sub>, there<sub>4</sub>, . . . , there<sub>n</sub>." This seemed to work all right if one had only one correct energy image from the known universe in the energy

bowl. In practice, however, it seemed to operate more like the positive feedback of a butterfly trying to fly to a brilliant flame. We certainly "butterflied" all over the universe before we successfully located our known segment of the universe and subsequently landed at Stian.

This flight had given me experience in ways which I had not anticipated. I couldn't help but wonder why the Master hadn't asked the Antarean how to get home from the first. Why, also, was it so important for the Master to contact the life on the other planet when he was planning to go on to Stian anyway? With my analytical approach to life I couldn't help but summarize what I had learned: (1) Masters are not prime causes in the universe. (2) Only a relatively small portion of the universe is controlled by the Master Race. (3) Masters can be immobilized by terror, are cowardly and can be injured or even killed. (4) Masters are not very intelligent. And (5) I love Masters!

Quite an education for a ten-year-old cowlike domesticated member of the human race!

## V

Before departing the ship on Stian I was again ushered into the Master's presence. This time the Carrier held him in such a way that his charred and blackened orifice tube dangled into a small cup of medicated fluids. Again I felt the exhilarating effects of the Master's scanning.

"Your race," he began, "has a

penchant for creative work in the biological sciences. Thousands of years ago we Masters determined to seek out a race such as yours. By careful selection and breeding you have become the first of the line who we believe to be capable of serving us in a very special way."

The Personal Attendant removed some sort of decoration or instrument from the round ball which composed the ventral portion of the Master. My mouth became dry and my hands moist as I struggled, again, to formulate questions regarding his implication that I was one of many.

The Master continued, "We Masters have a very special problem. As you have seen, while the volume of our living space increases as the cube of the radius of our expansion, our birth rate is now constant, since we utilize the whole planet surface for reproduction. But the rate of increase virtually halts any reasonable expansion of our space control. Since it is the Masters' place to rule all life, the problems must be solved!"

I thought of Vanatta's peculiar life which came in threes and wondered if there might not be some relationship between Vanatta's inability to propagate away from her sun and similar difficulties for the Master Race.

"A Master will discuss this problem with you in detail upon your completion of advanced training," he finished.

I was pleased to note that wherever I traveled, the Master's admonition for complete cooperation preceded me. Stian's life forms were

# ANTAREAN



simple variants of carbon, nitrogen, hydrogen and phosphorus. I checked gross form prediction from primary molecular structures for levels twenty, seven, four and two. No significant deviation from fact could be observed. The highest life level on Stian was two — a life form generally weak in science but growing a sound technological base. The Stian himself was a highly chitinous form of life with clusters of clawlike fingers located in such a way that opposition of fingers was guaranteed for nearly every desired direction.

I further found the Stians to be neither friendly nor unfriendly but simply behaving in ways that were directed by Masters.

My hotel suite was all that could be desired for comfort. More comfortable than my training cubicle, yet supplied with all of the scientific aids which might be successfully utilized; it made me feel important. Still I felt uneasy about my present quest for advanced knowledge. Somehow I knew that I should alter my plans by going directly to Vanatta. Yet, without the proper reason to justify my feelings, I could only brood.

I brooded a good bit. Lacking a Master's way of scanning immediately to the core of the matter, I began to sense an incompleteness in my own ability to face up to simple problems. Yet wasn't I genius Genetic?

Eventually I was able to phrase the problem in terms of my specialty. Teachers probably viewed my trip as "advanced" only in the sense of helping me to *verify* that the basic structures of genetic knowledge are

sound. With their end in view, I had been guided through an itinerary which would sample various hypotheses. Whereas, I viewed "advanced" from the point of view of facing and solving more and more problems composed of challenges to the structure of genetic science. Briefly stated, my continued growth as a Genetic was in the facing of unknowns like Vanatta. Certainly I could not grow by following my present itinerary!

Although exhausted both emotionally and physically from my earlier attempts to view this question from the point of view of a Master, I still rushed to change my direction of travel. A ship with full Antarean crew was made available to me as soon as my desires were communicated through a Grammer.

## VI

I knew from Vanatta's 2.4 density as well as its gaseous envelope, opaque to all but ultraviolet, that life molecules here would tend to be both lighter and heavier in weight. Lighter because initial chance meetings of chemical elements would be favored for the lighter elements. Heavier, because each life molecule would need an opaque protective shield to prevent the ultraviolet radiation from disrupting the bonds which hold together the larger, complex molecules. I also knew that neither of these two effects was sufficient to cause the atypical behavior of Vanatta's life. I was eager to land, and sure that my choice for growth was correct.

# PROTECTOR



At Vanatta's spaceport, I grabbed my small ensemble of personal possessions and quickly walked to the cubicle with the colors of the rainbow. The Grammer proved to be another human like myself. He accepted my nod with one swift glance at my proffered yellow star — the sign of the Genetic — and then began to speak.

"Your arrival has been prepared. Make yourself comfortable and look at the enclosed list of specifications. I have been instructed by the Masters to see that you have every possible form of cooperation. I must admit that their overriding command is peculiar within my experience. Naturally I, as well as all others here on Vanatta, will do everything required of us."

Once again I was impressed with the sense of order and purpose brought to all planets ruled by Masters. All of us, human and alien, were certainly fortunate to be guided by such beings, bringing us all to a full sense of direction, purpose and accomplishment for the Master!

The Grammer continued, "When you have reviewed the preliminary specifications for your scientific needs here, and possibly made further selections, I would like to give you a brief summary of the services which are available to you."

I looked at the list and, much to my surprise, saw nearly a complete laboratory as well as sundry supporting elements. In my own eyes, my stature as well as the importance of my mission increased. Only the location of the laboratory — in the heart of a large city — was possibly

contraindicated for my studies. Since the matter was connected to my work I found it easy to vocalize my feeling.

The Grammer, tall and gnarled of appearance, accepted my request with characteristic patience. I was fitted with an Antarean spacesuit so that I might move between human environment buildings and, much to my surprise again, the Grammer indicated that he was assigning himself to me for the duration of my stay.

The Grammer, whom I learned to call Grammer, directed our track vehicle to a hotel suitable for our temporary needs. Tingling with great excitement, I fell asleep with difficulty. My last thought was mixed in nature. I thought of the special problems of Vanatta which could be so exciting to a Genetic. I thought, too, of the continuous close working relationship between myself and the Grammer. Humans I had known, but never continuously for any length of time. Would this relatively young, perhaps 25 years old, Grammer exhibit traits of human behavior hitherto unobserved by me? Would the concept of "affection" be reborn by our close relationship? Neither the Histories nor my Teachers had prepared me for the experience!

The next morning the Grammer and I rode a second track vehicle to a cubicle in the City of Uni which contained the equivalent of Vanatta government. Here, encumbered by our suits, we were escorted to a large wall map showing the contours

of the planet as well as traffic tributary systems. Interpreted by Grammer, I learned that the network did not depict any pattern of "threes" as might be expected from the nature of Vanatta life. Grammer memorized the main features of the board and, between the two of us, we were able to locate several geographical positions which seemed to fit my requirements.

I knew that Vanatta had no large ocean or lake systems but that pools of condensed vapors formed at the foot of most hills. Since Vanatta consisted mostly of rolling hills, most of its terrain was sprinkled with these condensations. I wanted to locate near one of these. I also wanted to be away from civilization as known in the cities of Vanatta, yet close enough to be able to observe and compare life in its different levels of complexity. Via hovercraft, Grammer and I searched until a satisfactory location was discovered.

I expected to go back to our hotel cubicle and await word that some sort of primitive structure had been erected. Again this Grammer surprised me. He reached for the radio broadcasting equipment and, in several swift syllables, ordered work to begin.

Within 15 minutes, large hovercraft were carrying pre-assembled structures, while other hovercraft directed their assembly. I can't believe that more than three hours passed between their arrival and the signal to Grammer that my modern laboratory was ready for immediate occupancy.

I was, at first, quite optimistic about solving the genetic problem posed by Vanatta life. Wasn't I, by the admission of the Masters, the end product of a long line of humans bred for the sole purpose of being genius Genetic?

Nearly five years passed before real progress was gained! My 10-year-old optimism (and egotism) soon evolved to a pattern of careful scientific thinking. As time passed, I learned to challenge more and more basic tenets taught to me by Teachers and my unshakeable teaching machine. Answers proved to be basic — and simple!

Grammer and I became quite close. I learned what "affection" meant and vowed, in my own subconscious way, to retain Grammer as my assistant throughout my service to Masters. On Grammer's part, his expression remained as nearly unreadable as ever. I knew, though, that this was his genetic heritage just as my peculiarities were mine. I knew, too, that he shared my feelings of affection.

The equivalent of one-celled life (or one-celled colony life) could only be found in an amorphous form on Vanatta. Between this life level twenty and the next level of nineteen, there was a jump which could not be accounted for by theory. Explanations of this gap was, I felt, the key to explaining, or at least leading to an explanation of the reason why Vanatta's life could not be reproduced away from their sun. Unlike our earth colonies, level

twenty life here was not true cellular life. It seemed to fail to produce the equivalent of our colony specialization.

One-celled life, like the *Chlamydomonas*, begin the process on Earth. *Pandorina* was composed of eight cells embedded in a spherical matrix of jellylike material, yet none of these eight were much different from *Chlamydomonas*. The combined beating of their flagella cause the entire colony to act in unison for locomotion.

Another form, the *Pleodorina*, is composed of many more cells clustered in the shape of a hollow sphere; aside from the increased number of cells there is little difference between this one and *Pandorina*.

One difference is striking, however; it is that the smaller cells, the soma, are sterile for reproduction purposes while the larger are not. So at this level some specialization has begun.

A much larger aggregate is the *Volvox*, a beautiful hollow spherical colony consisting of several thousand cells. Again, these resemble the *Chlamydomonas* in most respects, although there are tiny bridges between individuals which tend to lock them together more securely than the loose jelly or other forms. Almost all of the cells are alike, although there are some that are larger and have a different appearance. These are reproductive cells. Some are bundles of small bodies, the sperm or male cells, while others are large ovoid egg cells. These special sex cells reproduce the colony

by a sexual process where the sperm are released into water, where they swim to and unite with the egg. This subsequently becomes a zygote which overwinters in a heavy-walled case. Other reproductive cells merely divide and move into the hollow of the sphere where they become small colonies, known as daughter colonies. These eventually burst out, destroying the mother and becoming adult colonies themselves.

Two important events occur in this gradual association of cells. First, similar cells aggregate into a mass which apparently succeeds better. That is, there is strength in union. Second, division of labor is initiated among the cells, some becoming sterile and functioning only in locomotion, whereas others retain the primitive condition of colony-reproduction. From here, differentiation of the soma cells continues in various directions toward greater and greater complexity, and thus up the long trail to such highly intricate forms as Masters and their servants.

Vanatta life, contrariwise, had jumped from lifelike chemicals at level twenty to relatively high forms of life. Vanatta had these key peculiarities to untangle:

1. Life would not reproduce beyond its own sun.
2. Level twenty life consisted of a homogeneous, soupy, lifelike chemical.
3. From level twenty, life jumped to level six with no apparent intermediate steps.
4. Level six life consisted of six basic similar patterns, any three of

which could reproduce its own kind as well as twenty-seven other apparently unrelated patterns.

5. All thirty-three forms could reproduce, by reproduction in "threes," to produce any of the others in an unknown or unpredictable manner.

6. A basic reproduction unit is any three life-level six entities.

I decided, after nearly two years of fruitless effort, that it was not only the Masters who were ignorant. One Master had told me that Vanatta life was incapable of being reproduced beyond its sun. I had accepted this in the way it was tendered — that is, the direct influence of some mysterious energy of Vanatta's sun determined and remained as a vital agent of Vanatta life. The question which seemed to me to display my own ignorance was this: Did life of Vanatta really find it impossible to reproduce away from the sun? Or was it merely a case of absence of supporting symbiotes required for the breeding process? When the answer was reached I compared my intelligence unfavorably with the intelligence of a Master!

We, Grammer and I, established the basic ecology of a small Vanatta mammal called a Bra. After several months of close observation in a closed environment we shipped three Bra to another solar system. In due time we received the news that the Bras had brought forth three apparently unrelated mammals — yet to be found in our list of thirty-three.

Hindsight is easier than foresight. Still, I, genius Genetic, deserved all

criticism for this, my first research error. Never again would I be so willing to accept any statement as truth, whether made by book or Master. Everyone knew that Vanatta life could not reproduce beyond its own star. Yet the truth lay somewhere in the ecology of the life form, not in peculiarities of its star!

## VIII

My success in reproducing the Bras away from Vanatta's sun caused reverberation throughout the space of the Masters. This time, ten Masters scanned Grammer and me simultaneously. I shivered both with fear and with anticipation. I couldn't help but feel buoyed up by the personal attention of so many Masters. Yet my analytical talents continued their ever-searching classification of fact, and I noted, for the first time, their similarity of appearance.

Each Master was a small ball-like object with trailing feeding orifices, slender, tapered and simple of construction. The light-sensitive tissue forming a small circle around the crest of their orblike body faded through pink, red, green and blue, reflecting, I believed, the state of the "emotions." Each had the same color of neutral gray, laced delicately with a twin diamond-shaped pattern where was found the primary sensing organ for their scanning functions.

I counted the personal retinues and found each Master with Carrier, Personal Attendant and six or seven other specialities. Nearly 100 life-forms of one type or another trailed



behind or held the Masters or fed them. Certainly this was an impressive example of cooperation of life forms! This in itself was justification for dominance of the Masters!

One Master spoke: "You have been bred for your job. Therefore, what you do is pleasure. But we Masters have waited for many generations for the promise of solution to our breeding and consequent space dominance problem. We have come to commend you for your efforts on our behalf."

I knew that once again the Masters were jumping to the wrong conclusion. I broke in hastily.

"I have not solved Vanatta's problems, Master."

The speaking Master's eye band turned bright pink as he replied equally hastily, "But you have bred Bras outside of this system, haven't you?"

"Yes," I replied. "But all I've shown is that the life of higher forms depends in some manner on its own lower forms. And that these forms are not equivalent to others found elsewhere."

I tried a new approach.

"Masters," I said, "I cannot explain what I must. But before I can accomplish my basic purpose in life, I must finish my training here on Vanatta. I am only now beginning to mature in this respect."

Reluctantly, it seemed, the Masters acceded to my request to postpone work on their problem. Once again Grammer and I were left to our own devices.

Life continued, and I made slow but steady progress. Grammer en-

joyed music, books and reading his professional Grammer literature. I learned, slowly, to enjoy a slightly alcoholic drink each night with Grammer. We would sit beside the music computer, drink in hand, and listen with pleasure to the various permutations and combinations formed. At least Grammer enjoyed the sounds. I enjoyed sitting next to Grammer and the feel of companionship which was denied so many of my race.

I knew I wasn't disloyal to the Masters since I was doing exactly what they wanted me to do. Anyway, it would have been impossible to be disloyal!

## IX

The second breakthrough occurred when I compared the nucleus of any of Vanatta's life at each level against that of Earth cells. Of course this kind of comparison had been made before, but the conclusions reached were not correct. I noticed that all of Vanatta life forms, except the lowest "soupy" level twenty, contained more than one set of genes. The "breeding in three" phenomenon turned out to be directly related to the fact that exactly three different sets of genes were contained in each cell. This puzzled me for some time, until I remembered that back in the twentieth century, two British scientists, Dr. Henry Harris and Dr. John F. Watkins, had demonstrated that cells from different animals, including man, can be fused and that the new hybrid cells are able to live and multiply.

At that time, on my native Earth, living combinations of hybrid cells were formed from species as diverse as hens and rabbits, and men and mice. I remembered this information well not only because it marked a significant milestone in genetic research, but because I would normally be exposed to all available information, whether important or trivial, in the course of my training. I could even remember that Dr. Harris reported his work in a publication known as *Discovery* in April, 1966. I was never taught what a "magazine" was, however.

A close study of the "soupy" level twenty life revealed the interesting information that there were perhaps several million different types of complete genes scattered throughout as many different cells. The DNA, which contains the coded heritable information which is passed on from generation to generation, and RNA, which is the "messenger" carrying these codes, each contributed their own unique effect upon the cell body. A given cell found in this "soupy" mixture would often contain as many as ten different gene structures. Since each structure could "tell" the cell body what to do without "interference" from other unlike structures, life necessarily retained its primitive flavor. Under such unintegrated conditions, life could not develop beyond this stage! Since there are no incompatible mechanisms, like those which result in the destruction of tissue or organ grafts exchanged between different individuals, the composite cells carry out life functions in an

apparently integrated manner. The instructions which the genes of one "species" in the hybrid cell transmit are understood and acted upon by the cytoplasm of other "species."

The vehicle for this activity on Vanatta was twofold: A peculiar form of virus which appeared to be pervasive, endlessly, throughout the texture of Vanatta's atmospheric blanket was weakened or killed by the strong ultraviolet radiation extant throughout Vanatta daylight hours. The dead or weakened viral material generally found itself mixed or diffused throughout the ecological system — particularly whenever condensation of Vanatta's gaseous blanket occurred. The viral material, although dead, in turn performed in almost exactly the same manner as in Dr. Harris's original work. He exposed dead virus to cells of different species. The cells clumped together. The membranes dissolved at the points of contact and their cytoplasms merged. When the nuclei of different cells merged, the new cell contained several nuclei of different species which was called a heterokaryon. The cell remained alive and continued to function, synthesizing DNA and RNA. Sometimes the nuclei fused to form a larger nucleus, and sometimes they divided to form several daughter cells. Here on Vanatta, primitive cells evolving from their own chance encounters, when in contact with this peculiar virus, dissolved at their points of contact, and the result was a primitive hybrid life form.

The problem of "threes" was evidently solved. Yet the mystery of

the great jump from level twenty to level six remained.

**D**uring the next year I greatly increased my challenges of the principles which make up "genetic science." At the same time, I greatly increased my disdain for the absoluteness of any theory. In the meantime I learned several new things from Grammer.

It seems that Grammer had once talked with a female of our species. I had not really thought about this aspect of life before. It was true that our life form required two for reproduction. But the Masters had long ago instituted a bank of ova and plasma from which they supplied their technicians and which sufficed for their needs. Since growth of the fertilized ovum was carefully controlled by the technicians until "birth," no need for such ancient concepts as "mother," "father" and so forth existed. I was such a baby. And from birth on, I was subject to either nurses who were trained to provide for only the ordinary processes necessary to biological growth; or I was subject to the Teachers. The concept of "female" had not ever entered my environment or my thoughts until placed there by Grammer.

The closer I approached to fifteen years of age the more interest I seemed to feel in the concept. It was clear that Grammer had long had such an interest. I saw him look with feeling of melancholy whenever he discussed the experience of communicating with and for a female.

When Grammer was taking his final education trip throughout Master's space he was ordered to accompany a group of Protectors. They were on their way to a planet which was located deep within the space controlled by the Masters but which had not been communicated with for several generations. As a matter of fact, the existence of the planet had been lost for all this time. Normally the Master who controls each planet is responsible for whatever governmental activities are required between systems. In this instance, the Master had neglected to communicate for some time. Meanwhile, someone whose normal day-to-day work was coordinating activities between thousands of planets had overlooked this one.

Ent, by name, was Earthlike in flora and fauna. It had been colonized by Masters with human metal miners to serve as the raw material source for copper. A Protector ship, returning from duties having to do with expanding the boundaries of Master's space, accidentally rediscovered the planet. According to the Antarean space catalogue, Ent was a rediscovery.

The first ship to land on Ent was attacked without warning by level one humans. Except for the Protector's nucleonic shield, all would have been pulverized when the first bomb exploded. Subsequent police action by the Protectors soon decimated most of the population, leaving only a small, hard-core group hiding in bombproof shelters under the main cities.

Eventually the Protectors succed-

ed in introducing a non-lethal gas into these caverns, thus capturing all of the remaining humans intact. These consisted predominantly of unscreened women and children. The children, of course, were put to death instantly, since the Masters did not need any more raw stock of this type. The women were saved for questioning.

Grammer was given the job of questioning the women and of translating for the Protectors. The story which he learned was this: Generations ago, a Master had entered a deep copper mine which also contained strata of radioactivity. Although much of the mining work was automated, this Master had the unusual desire to experience life under tons of earth crust. He, his Carrier and his Personal Attendant followed the automated tracks without being aware of the radiation hazard. The Master had his "picnic" below surface, returned to his regular home cubicle and lived life normal to all outward appearances.

As the years went by, however, the scanning mechanism of the Master deteriorated swiftly. When the Master thought he was "reading" one thing, the facts were that he was reading another. Under this unfamiliar condition of faulty screening, a group of human deviants, antipathic to the order of Masters, was accidentally born and survived. These, in turn, took advantage of the Master's condition and rapidly turned all technology toward their own ends.

Eventually the Master was killed and the planetwide government tak-

en over by the deviants. Only by equally unlikely accident — the loss of space coordinates — was the existence of Ent forgotten by the rest of civilization.

Grammer retold this story to me many times. Each time he would finish with a description of a "cute little blue-eyed brown-head" who seemed to affect him in some very unusual way. He didn't actually cry when he thought of her, but he came close to it. I still didn't understand why he felt this way about such purely hereditary traits as "blue eyes," "brown hair," "red lips," "nice figure," and so on; but I did understand his feelings over loss of companionship!

After many months of interrogations, Grammer was present when all remaining human life on Ent was destroyed. I believe that his enigmatic disposition must stem from that day!

## X

For the one billionth time, it seemed, I fed varying axioms about life to my computer. These axioms opposed, in either a major or minor way, the fundamentals about life which I had learned as a student in the training cubicle. This day, nearly five years from my initial arrival on Vanatta, I challenged the derivable consequences of the first goal of life — to survive!

Life usually can be thought of as requiring an accretion of life to life. That is "life begets life, and if the quantity of life it begets is not greater, by some small fraction at

least, life does **not** survive in that form. I challenged this assumption in a very slight way. When life increases, space is consumed. But this attribute is considered a secondary manifestation of the fact that life begets life — and increases in *number*. The fact that a 1.1% rate of compounded increase in numbers of life units results in, say, 1.1% compounded increase in space utilization is definitely *not* considered a basic postulate upon which to build a science called genetics. That is, one doesn't postulate the major goal of life as to "consume" space!

Yet the consequences of "to survive," when taken in context of the Vanatta problem, led directly to consideration of this new axiom. In turn, consequences of the acceptance of this as a fundamental axiom led directly to my final solution of the Vanatta problem.

Many years ago, according to the Histories, a human cargo called the Pythagoreans tried to reduce the whole universe to number and geometry. One of the problems which they developed was to imagine a plane figure which could be used repetitively in the plane to fill all of the plane and leave no points unfilled and without overlap. One such figure turned out to be an equilateral triangle.

Another problem was to find a three-dimensional figure which could be used repetitively to fill all of space. One such figure is the tetrahedron; another is the cube. Only five regular solid figures have this property.

In the unrecorded past of Van-

atta, chance combinations of chromosomal materials finally provided a three-way structure which was truly integrated at more than the primitive level necessary to sustain life for an individual cell. Even my advanced science of genetics, aided by my computer, would be hard pressed to predict the many potential life forms which each nuclei, of the resulting hybrid cells, might have propagated if directed by the course of normal evolution.

Chance combinations had produced a particular family of gene structures which not only sustained level six life, but whose configuration provided an internal protective sheath which prevented additional nuclei from entering their successful form of hybridization. The sheath followed an elementary rule of "filling all of space" thus enabling the cell to protect itself under siege of the viral material so peculiar to Vanatta.

The consequences of this protection was that three nuclei were free to pursue their own joint evolutionary path throughout the ages. This combination, and only this combination, could have been responsible for higher levels consisting of thirty-three "varieties."

Naturally, too, "breeding" was required in "three," for, unless all three components were present to share chromosomal materials, no life was possible except in rudimentary form. Vanatta life was truly hybridized yet could only breed true as a hybrid!

Grammer and I had solved the problem of Vanatta. I was fifteen

years of age. I was now much more confident of my problem-solving ability!

## XI

**I** believe that any of the servants of the Masters are raised in a sheltered environment. Mine was particularly so. But even if this were not true, there would be no need for guards or special personnel trained to protect other beings. Except for the Protectors, of course. Crime was unknown, consequently prisons unneeded. Each being had his place in the well organized structure of the Master Race, and if the being did not fulfill his allotted function a new personality was reared as a replacement. This, naturally, was one of the great benefits which the Master Race had given to other beings including humanity — peace and order!

Grammer and I finished packing our vital records and other needs in preparation for departure to the planet of the Masters. Simultaneously, it seemed, we realized that never before had we heard discussed, or mentioned ourselves, the location of the planet of Masters.

In the normal course of this kind of travel preparation we would have relayed our request to the proper travel specialist, who in turn would prepare our schedule in some detail. This time, oddly, none of the travel specialists could give us any idea where the Master home star was. Nor could they prepare a schedule.

Grammer carried on the bulk of

communication as was his duty. But even he began to despair when by evening we were still no closer to our objective. Although more time might be involved in locating a Master, gaining his attention and presenting our little problem, it began to appear that this was the only possible way.

With no thought to the unusualness of receiving an unexpected visitor, Grammer answered our door summons, deep in thought. Both of us were shocked by the rapidity with which several dozen Protectors surrounded us. With obvious professional detachment they forced us into our environmental suit without allowing us the courtesy of an explanation. Our final destination turned out to be an antiseptically clean cell — one for each of us!

Although we were fed, watered and bedded properly each day, Grammer could raise no single word from any guard. I, of course, could not have formulated anything understandable to such people. I learned what it meant to be lonesome — to miss associations with Grammer. I was exceedingly pained to be denied the privilege of serving the Masters. I lost track of time. I became despondent. I lost weight and my appetite. Soon my waking periods blended into each other and into my sleeping periods. I vegetated!

**A**rousal and consciousness returned to me almost immediately upon sensing the Master's usual scanning process. Strangely enough, my analytical functions fixed upon

the Master's Carrier — measuring the height from the floor to the position in which the Master was carried — and then upon the usual retinue which trailed behind the Master. The particular Master who entered my cell looked exactly like all of the other Masters which I had seen.

Then the Master spoke. "I have already talked with the Grammer. I understand that you have completed your studies on Vanatta and are now ready to help us with our problem."

"Yes," I said with great surprise.

"We Masters are so important to the continuity of an orderly rule in all the universe, and we are so few, that we feel it vitally necessary to protect the sole source of our breeding. We did not distrust you, since it is obvious from our scanning that you and Grammer are loyal and always shall be. But we long ago learned from the Protectors several ways by which our beneficial rule can be placed in jeopardy."

I realized that I was getting an explanation for our treatment. Needless to say, I listened very carefully, hoping to hear a rational explanation.

"On rare occasions, Masters become sick through accident or radiation in which case our scanning sense becomes unreliable. The product of such an unfortunate experience might be the birth and growth of life inimical to our kind. If any such knew the source of our birth, they might easily destroy us. Also, as you know, there are areas of the universe at the boundaries of the Master rule where races live

which have not had the benefit of our kind. Should these races learn of our source by those such as yourself, who are of good intention, they too might destroy our race."

This explanation seemed to explain all except the reason for placing us incommunicado. I waited to hear the rest.

"A visit to our home planet is a one-way trip," the Master stated. "Also there are certain operations which must be performed on your brain."

When I heard the Master speak of this, my first impulse was fear — fear that any operation to my brain might endanger the very faculties which the Master needed to solve his problem. I was soon relieved, however.

"We insert a small cartridge of explosive at the base of your occipital bone. If, by some unusual chance, you are fifty miles or further away from the surface of our planet, certain secret carrier waves will automatically explode the cartridge."

Upon signal from the Master, the Personal Attendant brought a rose-colored, scented water near to one of his orifices. A small amount of the water was taken in and discharged. Only a slight change in color to the eye band could be observed during this activity.

"Oh, yes!" the Master continued. "We congratulate you on your successful solution to Vanatta's problem. We are eagerly awaiting similar solutions on our planet."

I never did receive a completely rational reason for our treatment. Lacking evidence to the contrary, I

had to add one more to the list of characteristics of the Master Race. They were frightened, paranoiac forms of life!

## XII

**O**n awakening from the operating table my compulsion to analyze awoke first. But, strangely, I did not think of my duty to the Masters. I first thought, "How pretty are those gray eyes!"

The surgeon who installed the capsule in my brain had pure black hair, gray eyes and a beautiful curving smile. Her laugh made me laugh, and her frowns made me frown. I tingled whenever she touched me while performing her chores. I began to understand about Grammer's feeling toward such "purely hereditary traits" as eyes, lips and cheeks!

She was a Surgeon and knew some genetics. Within limits, we could communicate. With great surprise I found other ways of communicating then through manmade symbols. She responded to my feelings. And, blessed with both Grammer and Surg (as I called her), I returned to my allotted work with renewed energy.

My initial view of Ed, the Master's planet, was by standard track car. At Grammer's suggestion, I requested, and got, Surg assigned as a member of my research team. Surg, Grammer and I arranged for a complete planetary review of the surface of Ed.

Always a large assortment of extra-Ed life waited upon us. Everywhere there were life forms performing personal, technical or ad-

ministrative duties for the Masters. A weird sort of fernlike form planned our Ed trip. It took the combined services of two other communicator specialists to relay between the language of Earth and the language of the "fern." I couldn't help but wonder, why, in this instance, a Master couldn't perform this chore for which they were so well suited?

Ed turned out to be nothing but cubicle after cubicle from pole to pole. I had never given it thought before, but it was easy to surmise where the basic pattern of cubicles and track cars had originated. They had been exported from Ed to all other Master-controlled planets. Yet I would still bet that they were not original with the Masters.

There was no obvious advantage to be gained from any particular location. So we merely selected at random and began building the organization of supplies and helpers that we would need.

Several weeks after our arrival Protectors met us with the request to accompany them. Again no questions were answered, and we were summoned into the Directing Hall of Masters.

The Hall of Masters was not really a hall but rather another standardized cubicle, arranged internally in such manner that nearly any sort of life form could move in or out while waiting on the pleasure of the Master. Flexibility seemed to be the keynote. Where before I had seen as many as ten Masters with perhaps ten or fifteen personal attendants each, here I saw each Master with as many as fifty attendants.



Since eight governing Masters comprised the ruling body, there were perhaps 400 personal attendants weaving in and out or standing about waiting for the significant wave of an orifice or screened message.

The hall became silent as the Protectors guided Grammer, Surg and myself in. The leading spokesman for the Masters was one of the most wrinkled balls of gray flesh I had yet seen. I supposed that this meant that he was a very old specimen of his life form.

I noted the slow motion of his dangling orifices as he motioned for his Carrier to lower him closer to my speaking level. Also, his eye band was predominantly ridged instead of smooth as found in the younger Masters.

Once again I relaxed with pleasure under the careful scanning of this oldster. He spoke. "Congratulations on your success on Vanatta. We expect equally successful research from you here on Ed. We are the governing body of all life, everywhere! Our problem has concerned us for many ages, and we look forward to its solution from you. Can you give us an expected date of solution?"

It was not only the suddenness of his question which caused me to appear in shock. Here before me were the true beneficial rulers of all "civilized" space. Here was the ruling body which made literally thousands of races live in peace and harmony. By birth and training — instinctively — I knew I was in the presence of the greatest life form next to God!

But, more than that, I was being asked to present "near-God" with a "date of solution" to His problem! I was tongue-tied. Without the special scanning ability of the aged Master, I never would have recovered sensibly from the meeting. He recognized and immediately responded to my communications difficulties.

"You are a specially prepared servant of the Masters," he said. "Your job will be done expeditiously, I am sure. I am decreeing that, except for the direct will of a Master, your every wish shall have first priority. As you already know, it is impossible to continue our planned control of space when the volume of space increases as the cube of the radius of our expansion, yet Master breeding increases only as the square of the surface of our breeding area — now a constant. When you have solved our problem for us, we will then be able to continue our beneficial expansion into all of space."

He paused long enough to dip the tips of each of his eight orifices into eight different colored bowls of scented water. I was fascinated to watch eight different attendants scurry in and out with the bowls.

The Master continued. "Even though you are a perfectly loyal researcher, we feel it necessary to charge you with an official statement as to your duties on our behalf. In short, you are hereby instructed — indeed commanded — *to improve our race!*"

I was made completely speechless by such an overriding command, especially when it was reinforced by

the Master's peculiar scanning talent. I nearly begged to some unknown higher being that I should not fail this enlarged and personally assigned, nearly sacred objective!

### XIII

**A**pplication of modern technology to optimization of the production of Masters here on Ed was amazingly efficient. With the exception of a small percentage of cubicles, all other Ed cubicles consisted of nearly automated breeding vats for the Masters. Their breeding limitation was approximately that of the area of the surface of their planet — a square factor — since nearly all of the planet was covered by breeding vats.

Each breeding cubicle consisted essentially of a large "swimming pool" about 12 feet deep. In the pool was a balanced biotic community. All necessary ingredients for supporting Ed's equivalent of diatoms, algae, amoeba, protozoa and other essential life forms were present up to, and including, the worm fish. Actually, each form of life was there to contribute in its own way a necessary ecological balance, thus providing an environment proper for the growth of the wormfish. The wormfish was the necessary host for the Master!

Each fertile cell of the Master contained a single flagellum which lay in a fold of the outer membrane throughout its length. It formed an undulating membrane which was effective in propelling the tiny cell through blood or other body

fluids. Millions of these fertile cells were introduced to the closed ecology supporting the worm fish, and inevitable encounters by the cells with the fish resulted in the supplying of a proper host for the Master cells. Each fertile cell found its way to the internal organs of the wormfish. Perhaps two hundred cells could be nourished in all. The blood of the fish acted as both source of food and convenient sewage disposal system.

Once in the presence of a suitable spot, the flagellum changed to a rasped hook which, once driven into several of the wormfish cells, could not be easily withdrawn. Hanging by this hook, each fertile Master cell began its growth and transformation.

First a tight membrane was constructed around itself, impervious to all except food of the proper chemical and physical properties. Second, within this membrane, the cell nucleus began to grow in size. A light fiber strand of nerve material extended from each chromosomal protruberance to form eight rudimentary pro-tentacles. Other than modification of other chromosomal materials to form brain tissue and a circular, light-sensitive band, the only other two major growths were the development of extremely primitive muscular tissue and a very primitive pro-stomach.

With fourteen days of growth, the first fertile cell reaches a kind of maturity. The membrane cracks open, and the living but miniature Master swims out. Through the use of its unique scanning sense it im-

mediately locates and kills every other Master cell hanging from the wormfish. The one remaining miniature Master then swims to the major control locations of the wormfish's brain. Here the Master establishes both home and control over the activities of the fish, pending its further growth. When a point is finally reached where the "tumor" aggravates the host beyond its normal biological limits, the Master, with profound foresight, arranges to be evacuated just prior to the death of the host.

In the new environment consisting chiefly of water and dissolved minerals, the Master finds no competition for survival. He absorbs his nourishment in the same manner as before, using water instead of blood, and dissolved minerals instead of more complex food structures which were found in the blood.

No real intelligence is discerned in the little Master until it reaches sufficient size to store energy molecules. At this time it instinctively leaves its watery environment where the servants of the Masters begin its formal training — a training program dedicated solely to how to be master of the universe!

If my assignment were still that of increasing the rate of breeding rather than that of "improving the Master race," I am sure the technical difficulties would have been elementary. As a matter of fact I speculated as to why others had not attempted to transplant the requisite bio-system on other planets in other solar systems. Was it

their characteristic paranoia which prevented them from seeking obvious solutions? Was it their complete lack of trust in others, coupled with their extremely tight security precautions? Or was it simply their characteristic self-inflated ego which prevented them from viewing themselves from any other viewpoint than "special" or "difficult?"

Whatever the reason, I was thankful that my Masters had determined to expand my role to "improve" their race; for, with this more difficult assignment, I was sure that Grammer, Surg and myself would have far more occasion to stay together!

What constitutes "improvement" of a race? Certainly, from the human point of view, the need for companionship, the eternal struggle to solve problems and the extreme adaptability of our genetic plasma to historical change are all plusses.

But, what about the tremendous computing ability of the Antareans which contributes to their dominance in space? Or their stress-free exo-skeleton, so cleverly designed to compensate for rapid and varied changes in gravity? What about the long-lived, nearly classic example of the adaptability of Earth insects? Or the tremendous weapons-forming and fighting ability of the Protectors? Which of the nearly endless characteristics possible to life should be acquired by our Masters? Which, too, of the characteristics now dominant in the Masters should be retained and which masked?

I redoubled our efforts. Even though the highest technical skill



D SERVE THE MASTERS

was ours for the asking, the greatest of computer technology was ours (for projecting possible characteristics from change of nucleus to final adult life form), the highest of loyalty was ours to our duty, I was soon convinced that a Genetic genius is not so very bright! It is one thing to merely solve a technical problem but another thing entirely to define "best" characteristics for the life of a whole race. Especially difficult was such choice because I knew the Masters were virtually perfect in themselves.

It was at this point in my work that both Surg and Grammer became deathly sick. For the first time in my young life I realized what it was to be alone. At first, however, I wasn't too disturbed. When all efforts to find a human Medic on Ed proved fruitless, I tried other forms of life which might be competent in this field. When this effort, too, failed, I appealed to the Masters. Every possible door was opened on my behalf. A Medic was found in another solar system and brought to Ed within forty-eight hours. My relief proved premature, however!

On the third day of the Medic's arrival, he approached me with an alien Grammer. "I am terribly sorry," was his message, "but there is no knowledge which I have which can effect a cure. As a matter of fact, I am not the least bit familiar with their form of sickness nor its cure. I have checked with my colleagues on Earth, and they concur. Other than intravenous feeding, there is nothing more I can do."

My world spun! Never since the days of my imprisonment on Vanatta for desiring information on the home world of the Masters had I ever experienced such despondency. I became alternately despondent and exuberant. I was not rational. Yet the struggle to survive which must lie dormant in all human seed awoke to push me to greater and greater heights of rationalization. I rationalized that since I was only competent in the field of genetics, I would help in the only way I knew how, by applying my knowledge to their sickness. This was much like saying that since I was an expert bricklayer, I would lay bricks, expertly, until their sickness was cured!

I selected samples of both Surg's and Grammer's cells. Each was in a deep coma. I studied the chromosomal materials. The first look made me doubt my senses completely. "Perhaps," I thought, "it is only a clumsy laboratory error." Their genes were nearly identical. Furthermore, there were twice too many. I selected sample after sample under the utmost control techniques; yet still the analysis was the same. About the time that I began to doubt the validity of the whole of biologic genetics, I too passed into unconsciousness!

Three weeks later I was told that I had fallen over the sick bodies of Surg and Grammer, that Surg and Grammer had awakened nearly one week earlier than I, and that nothing the Medic had done for any of us was of any real help.

Again an waking my first thought was on the beauty of the female of

my species. Surg was feeding me intravenously. Her first words surprised me. She said:

"Good morning, my love! Can you discuss the nature of true hypothalamic replacement or the parsing of a verb?"

My answer surprised me even more. I said, "Why, yes, I can!"

Why was I not tongue-tied? Why was I not restricted to thoughts of my specialty? For the first time in my life I was able to contemplate, with ease and understanding, subject matter not necessarily related to my own. It seemed natural to think in the areas of medicine or communications. Prior to my sickness I could discuss subjects only if they became my own — through disguise, deception or actuality.

Needless to say I was appalled at the subjective changes in me.

I was even more appalled when I discovered similar changes in Grammer and Surg. We were like three school children who have just learned that holidays are forthcoming. Or, better yet, we were like three deaf-blind-mutes who have suddenly been given the gift of hearing, sight and speech. Three worlds to explore, each of comfortable fit like homeworld — yet each was new, novel and infinite in nature! For each of us could understand and communicate within the framework of one another's competence.

We foresaw the day in the future when each of us would become Grammer, Surgeon and Genetic combined. For now, we were high-

ly specialized and highly trained humans with large appetites and newly born capacities for learning in these allied fields of knowledge.

Somehow, somewhere, we had been improved as individuals.

Here lay the germ of a clue which was sorely needed to perform our duties toward our Master. Once again we set to work. This time I was not too surprised to find that the chromosomal material from cells of each of us were very similar and represented three times as many as normal. Here was an obvious source of our change. Through screening by Masters each of us was the product of extremely fine selection for attributes desired by the Masters. The very process of this fine screening caused each of us to be "wise idiots," since genetic characteristics necessary for cross-communication amongst ourselves were lost. Yet, obviously, any race like the human would consider such a characteristic as the ability to understand one another as basic. Now, through some yet to be deciphered fluke related to our joint illness, we had become hybridized so that gene material of each was found in the cells of each. Our cytoplasmic tissue was capable of responding to the joint, yet integrated, directions from each new nucleus. We had become, through accident, a hybridized polyploid!

Sometimes gametes possess a diploid instead of the usual haploid number in some cases even three, four or five extra sets. Organisms possessing more than the diploid number are called polyploids. They

may be larger and more vigorous than the usual diploid, hence polyploids are often deliberately generated — especially in the plant world. Polyploid flowers are usually larger than normal ones. Very little was known about polyploidy in animals, probably because it occurred so infrequently. We were a living example of the possibility of induced heterokaryonization within the same species!

The three of us, now working together as a nearly perfect functioning research team, soon traced the source of our strange infection to viral matter which had followed us from Vanatta. The very same viral material which caused the dissolving membrane of Vanatta cells, thus opening a cellular door for other nuclei and consequent heterokaryonization, had followed us to Ed. Here, we three had unconsciously exposed ourselves to it, each providing the cellular material necessary for its first performance on Ed.

Once the agent of our illness was identified, we easily cultured the virus in a protected environment while taking the precaution to sterilize everything else. Once again we set to work on the problem posed us by the head of the Master Race — to improve the Masters!

#### XIV

I soon realized that my former "wise idiot" capability, no matter how technologically perfect, nor how logically accurate, was the wrong avenue of approach for "im-

proving" the Master Race. Only on a philosophical plane would their ends be met. Certainly life which was so successful that it was the "master" of all within its biosphere was already "improved." For if the basic "to survive" were the only criterion for life, the Master Race had met this goal on its first trial. Its second trial of life had yet to be offered!

However, it took no genetic genius to realize that capacity to adapt was almost nil in the Master Race. Further improvement was needed in that direction. Secondly, Masters needed hundreds of thousands of supporting life forms merely to allow them to be comfortable. Additional billions — perhaps more — were destroyed just to insure their dominance. Was this economical for either Masters or nature? Perhaps this could be a second direction for improvement. Finally, in spite of the tremendous gift which nature had bestowed to the Masters — the gift to know one's "neighbor" as well as oneself — the Master remained an unsocial form of life. Whatever improvements were made must take this into account.

Both the means and the coded improvement goals were scientifically prepared for completion of our assignment. I prepared large quantities of Vanatta's special hybridizing virus while Surg and Grammer sought for, and received, some rare human protoplasm which had been laboratory-grown prior to Earth's first visit by the Master Race. No screening had pre-selected genetic materials from this tissue culture.

Probably it was the only human protoplasm in existence for which this could be said.

Now the work became one of straight genetic engineering. Just prior to the introduction of fertile Master cells to their breeding tanks, I mixed the Vanatta viral material as well as growths of human protoplasm. As was to be expected, each fertile cell wall dissolved at its point of contact with the attenuated viral material, and, as a consequence, each human cell introduced its nucleus in the fertile cell. I didn't expect a human cell to exist under the pending environment, therefore those cells which received the nucleus of the Master cell were unimportant.

The newly hybridized cells were then dumped into each breeding vat where, hopefully, a new kind of behavior would ensue. Fortunately most of the equipment was automated planetwide, and we could accomplish the whole job in a reasonably short time.

Our second phase began with the identification and treatment of all nutrients used by the Masters. Since this consisted of only eight colors of water saturated with different mixtures of anions and cations required for sustaining Master metabolism, we found no obstacle in adding our hybridizing mixture.

Our third phase consisted of preparing and shipping small packages of this same mixture along with proper instructions for its introduction to Master nutrients everywhere. The Protectors and their ships began a continuous work shift so that each Master got his share.

Our work was done. There remained only the clerical task of following up on the predicted progress of the great racial improvement program.

Perhaps our lifetime would not see its end. But I was sure that someone among my distant descendants would know its end — and remember its beginning. For I was determined to leave sufficient notes so that posterity would know what to look for as well as to explain why so many different life forms are scattered throughout such a large volume of space.

## XV

I am sure that the complete obedience of all live forms within the biosphere of the Masters, as well as the tremendous efficiency with which each form served the Master, combined to enable us to rapidly service everyone of the Master Race. I wasn't too sure of the end results in the case of adult hybridizing of human characteristics with Master characteristics. Here early training as well as pre-conditioning of intellect served to mask biological predictions.

We first observed the actual results on Ed:

A coma occurred for each Master just as with Grammer, Surg and myself. I had selected human characteristics long known to be dominant in hiding psi phenomena. These organelles served effectively to hide the ability of each Master to screen. I reasoned that the very characteristic which most contributed to the



successful domination of other life forms was also the same characteristic which prevented Masters from improving their race. For, without ability to screen, need arose to seek out other solutions to survival problems. With need for other solutions to survival came opportunity for adaptation of successful mutations. With adaptation of successful mutations came "improvement." And I was sure that "improvement" could only be measured in terms of successful capacity to adapt to current needs.

This, then, in simple form was my chief reason for hybridizing undifferentiated, unscreened, human protoplasm with Master protoplasm.

In the case of the adult Master, each responded in a similar manner once their screening mechanism was gone and consciousness returned. Each would roll into a small ball and shiver endlessly. Often its tentacles would combine together and form a hook which was repeatedly stabbed into the air. It appeared to be a complete regression back to its parasitic existence within the wormfish.

I wasn't too concerned with this part of the experiment, however. No Master would die and all would continue to be taken care of as long as they lived. Surely disorganization would take place in the Master's biosphere due to lack of a commanding head, but mostly the Masters would be cared for after changes as well as they were before the change.

There was always the chance that the Master would overcome his early

conditioning and training and find some accommodation with his human counterpart — thus giving each Master the pleasure of empathy for one's own kind as well as all of life.

Since our orders were to be obeyed by all Ed's life, and since Ed was the headquarters for Master civilization, we were, to all intents and purposes, the sole rulers of a galaxy which would soon be in serious trouble for lack of its main force of cohesion. This lack of "integrated kingdom" seemed like a high price to pay for improvement of the Master. In the long run — many generations hence — we would know.

The first major departure from normal behavior by the tiny Master cell, clinging within the blood system of the wormfish, was soon observed. Instead of killing all other Master cells not yet hatched from the protective cocoon, it directed itself immediately to the nerve control structure of the fish. Each Master unit, in turn, behaved the same. Such confused multiple control of operations within the wormfish caused the Master to leave the fish at an earlier age. All scanning abilities were gone. But the proportion of surviving Master cells was now many where there had been but one. So many living in the same closed bio-system caused greater conflict for nourishment. This greater conflict, actually the first conflict to which the Master Race had ever been exposed, resulted in the first opportunity-step on the evolutionary ladder. Whether its problems would be solved by organized family units

versus the environment, by strong-man rule, by development of keener brains — or whether the problems would be “solved” by succumbing to them — would be evident only in some far distant future.

This, I was sure, was the only reasonable answer to my Masters command to improve their race! I had succeeded in giving them a problem to solve at the microscopic level of existence. I had also succeeded in temporizing their feelings toward other life by introducing genes of the one race having the greatest affinity for other life — my human race!

As rulers behind the rulers, Grammer, Surg and I were able to complete the cleanup work without happenstance. Although all forms of life were quite concerned about the Master “sickness,” as it became misnamed, none would voluntarily interfere with their Master’s prior command which placed our desires ahead of all else unless directly countermanded by a Master. Protectors continued to protect the “sick” Masters. Grammeters continued to aid in interpreting meanings. Medics and researchers continued their functions. Bred and trained for duties under complete loyalty to the will of the Master, none were other than docile under the emerging emergency. We knew, though, that it would not be long before the lack of specific guidance from the Master Race would soon lead to complete chaos. It was not our intent to wait out this chaos on the planet Ed.

My job was done. I could no longer serve my Masters until and if, in the far distant, unpredictable future, the Master should overcome his evolutionary obstacles. As I well knew, the likelihood of this happening was very remote. For every successful race which reaches the stars there are perhaps a billion or so which succumb along the way. Yet, in the final analysis, there could be no other way! Regardless of the postulates which are known to be true for bio-molecular engineering, the universe of reality proves always and ever larger. No ultimate intelligence would ever reach such wisdom or size that it could create my mental construct and symbolism — the tools of science — complete and accurate pictures of any part of reality. This right belongs to a Supreme Being only!

So I did, in my compassion and love for the Master Race, only what could be done to satisfy their command. I started them again on the long evolutionary road of trial and error — but with a difference.

This time they had a “human” helper along the way. One who had already been over the path and found it successfully. Who knows? Perhaps their chances are far better than my feeble science can predict!

With these thoughts in mind, I prepared for our departure. We removed the buried explosives from our bodies and turned off the signal which could trigger the device at fifty miles up. No longer bound by need to twist and torture our thoughts through other persons for

minor gains in communications, we sought out and selected a planet which was Earthlike in many ways. It was already seeded with a small human colony at technological level one. We planned to ride out the forthcoming chaos there.

Privately Surg and I were hopeful that Grammer could and would find another human female as a "soulmate." We all three determined to continue our research activities as a team. With all of the future ahead of us, and nothing left to serve but our own whims — with only a twinge of regret for our Masters — how truly glorious that future appeared! Should we tackle

the problems of longevity, thus making the future ours too? Or perhaps the problems of psi functions, removing the masking elements from the genetic structures of all intelligent species, thus opening a door to multispecies unity?

With our increased capacity for successful behavior in allied fields as well as our new knowledge of heterokaryonization we felt equal to the tasks.

Surg and I, however, had our own private set of goals. And within it, I hoped our first child would have Surg's eyes and hair color — purely hereditary as they may be!

END

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# Venus Smiles

by J. G. BALLARD

*The statue sang. What's  
worse, it wouldn't stop!*

## I

**L**ow notes on a high afternoon. As we drove away after the unveiling my secretary said: "Mr. Hamilton, I suppose you realize what a fool you've made of yourself?"

"Don't sound so prim," I told her. "How was I to know Lorraine Drexel would produce something like that?"

"Five thousand dollars," she said reflectively. "It's nothing but a piece of old scrap iron. And the noise! Didn't you look at her sketches? What's the Fine Arts Committee for?"

My secretaries have always talked to me like this, and just then I could understand why. I stopped the car under the trees at the end of the square and looked back. The chairs had been cleared away and already a small crowd had gathered around the statue, staring up at it curiously. A couple of tourists were banging one of the struts, and the thin metal skeleton shuddered weakly. Despite this, a monotonous and highpitched wailing sounded out from the statue across the pleasant morning air, grating the teeth of passers-by.

"Raymond Mayo is having it dismantled this afternoon," I said. "If

it hasn't already been done for us. I wonder where Miss Drexel is?"

"Don't worry, you won't see her in Vermilion Sands again. I bet she's halfway to Red Beach by now."

I patted Carol on the shoulder. "Relax. You looked beautiful in your new skirt. The Medicis probably felt like this about Michelangelo. Who are we to judge?"

"You are," she said. "You were on the committee, weren't you?"

"Darling," I explained patiently. "Sonic sculpture is the thing. You're trying to fight a battle the public lost thirty years ago."

We drove back to my office in a thin silence. Carol was annoyed because she had been forced to sit beside me on the platform when the audience began to heckle my speech at the unveiling, but even so the morning had been disastrous on every count. What might be perfectly acceptable at Expo 67 or the Venice Biennale was all too obviously passe at Vermilion Sands.

When we had decided to commission a sonic sculpture for the square in the center of Vermilion Sands, Raymond Mayo and I had agreed that we should patronize a local artist. There were dozens of professional sculptors in Vermilion Sands, but only three had deigned to present themselves before the committee.

The first two whom we saw were large, bearded men with enormous fists and impossible schemes — one for a 100-foot-high vibrating aluminum pylon, and the other for a vast booming family group that

involved over fifteen tons of basalt mounted on a megalithic step-pyramid. Each had taken an hour to be argued out of the committee room.

The third was a woman: Lorraine Drexel. This elegant and autocratic creature in a cartwheel hat, with her eyes like black orchids, was a sometime model and intimate of Giacometti and John Cage. Wearing a blue crepe de Chine dress ornamented with lace serpents and other art nouveau emblems, she sat before us like some fugitive Salome from the world of Aubrey Beardsley. Her immense eyes regarded us with an almost hypnotic calm, as if she had discovered that very moment some unique quality in these two amiable dilettantes of the Fine Arts Committee.

She had lived in Vermilion Sands for only three months, arriving via Berlin, Calcutta and the Chicago New Arts Center. Most of her sculpture to date had been scored for various Tantric and Hindu hymns, and I remembered her brief affair with a world-famous pop-singer, later killed in a car crash, who had been an enthusiastic devotee of the sitar.

At the time, however, we had given no thought to the whining quarter-tones of this infernal instrument, so grating on the Western ear. She had shown us an album of her sculptures, interesting chromium constructions that compared favorably with the run of illustrations in the latest art magazines; but I was looking only at her huge hieratic eyes. Within half an hour we had drawn up a contract.

I saw the statue for the first time that afternoon, thirty seconds before I started my speech to the specially selected assembly of Vermilion Sands notables. Why none of us had bothered to look at it beforehand I fail to understand. The title printed on the invitation cards — *Sound and Quantum: Generative Synthesis 3* — had seemed a little odd, and the general shape of the shrouded statue even more suspicious. I was expecting a stylized human figure, but the structure under the acoustic drapes had the proportions of a medium-sized radar aerial. However, Lorraine Drexel sat beside me on the stand, her bland eyes surveying the crowd below. A dreamlike smile gave her the look of a tamed Mona Lisa.

What we saw after Raymond Mayo pulled the tape I tried not to think about.

With its pedestal the statue was twelve feet high. Three spindly metal legs, ornamented with spikes and crosspieces, reached up from the plinth to a triangular apex. Clamped onto this was a jagged structure that at first sight seemed to be an old Buick radiator grille. It had been bent into a rough U five feet across, and the two arms jutted out horizontally, a single row of sonic cores, each about a foot long, poking up like the teeth of an enormous comb. Welded on apparently at random all over the statue were twenty or thirty filigree vanes.

That was all. The whole structure of scratched chromium had a blighted look, like a derelict TV antenna.

Startled a little by the first shrill whoops emitted by the statue, I began my speech and was about halfway through when I noticed that Lorraine Drexel had left her seat beside me. People in the audience were beginning to stand up and cover their ears, shouting to Raymond to replace the acoustic drape. A hat sailed through the air over my head and landed neatly on one of the sonic cores. The statue was now giving out an intermittent high-pitched whine, a sitarlike caterwauling that seemed to pull apart the sutures of my skull. Responding to the boos and protests, it suddenly began to whoop erratically, the hornlike sounds confusing the traffic on the far side of the square.

As the audience began to leave their seats en masse, I stuttered inaudibly to the end of my speech, the wailing of the statue interrupted by shouts and jeers. Then Carol tugged me sharply by the arm, her eyes flashing. Raymond Mayo pointed with a nervous hand.

The three of us were now alone on the platform, the rows of overturned chairs reaching across the square. Standing twenty yards from the statue, which had now begun to whimper plaintively, was Lorraine Drexel. I expected to see a look of fury and outrage on her face, but instead her unmoving eyes showed the calm and implacable contempt of a grieving widow insulted at her husband's funeral. As we waited awkwardly, watching the wind carry away the last program cards, she turned on a diamond heel and walked across the square.

No one else wanted anything to do with the statue, so I was finally presented with it. Lorraine Drexel left Vermilion Sands the day it was dismantled. Raymond spoke briefly to her on the telephone before she went. I presumed she would be rather unpleasant and didn't bother to listen in on the extension.

"Well?" I asked. "Does she want it back?"

"No." Raymond seemed slightly preoccupied. "She said it belonged to us."

"You and me?"

"Everybody." Raymond helped himself to the decanter of Scotch on the veranda table. "Then she started laughing."

"Good. What at?"

"I don't know. She just said that we'd grow to like it."

There was nowhere else to put the statue so I planted it out in the garden. Without the stone pedestal it was only six feet high. Shielded by the shrubbery, it had quieted down and now emitted a pleasant melodic harmony, its soft rondos warbling across the afternoon heat. The sitar-like twangs, which the statue had broadcast in the square like some pathetic love call from Lorraine Drexel to her dead lover, had vanished completely, almost as if the statue had been rescored. I had been so stampeded by the disastrous unveiling that I had had little chance to see it, and I thought it looked a lot better in the garden than it had done in Vermilion Sands, the chromium struts and abstract shapes stand-

ing out against the desert like something in a vodka advertisement. After a few days I could almost ignore it.

A week or so later we were out on the terrace after lunch, lounging back in the deck chairs. I was nearly asleep when Carol said:

"Mr. Hamilton, I think it's moving."

"What's moving?"

Carol was sitting up, head cocked to one side. "The statue. It looks different."

I focused my eyes on the statue twenty feet away. The radiator grille at the top had canted round slightly, but the three stems still seemed more or less upright.

"The rain last night must have softened the ground," I said. I listened to the quiet melodies carried on the warm eddies of air and then lay back drowsily. I heard Carol light a cigarette with four matches and walk across the veranda.

When I woke in an hour's time she was sitting straight up in the deck chair, a frown creasing her forehead.

"Swallowed a bee?" I asked. "You look worried."

Then something caught my eye.

I watched the statue for a moment. "You're right. It is moving."

Carol nodded. The statue's shape had altered perceptibly. The grille had spread into an open gondola whose sonic cores seemed to feel at the sky, and the three stem-pieces were wider apart. All the angles seemed different.

"I thought you'd notice it even-

tually," Carol said as we walked over to it. "What's it made of?"

"Wrought iron — I think. There must be a lot of copper or lead in it. The heat is making it sag."

"Then why is it sagging upward instead of down?"

I touched one of the shoulder struts. It was springing elastically as the air moved across the vanes and went on vibrating against my palm. I gripped it in both hands and tried to keep it rigid. A low but discernible pulse pumped steadily against me.

I backed away from it, wiping the flaking chrome off my hands. The Mozartian harmonies had gone, and the statue was now producing a series of low Mahler-like chords. As Carol stood there in her bare feet I remembered that the height specification we had given to Lorraine Drexel had been exactly two meters. But the statue was a good three feet higher than Carol, the gondola at least six or seven across. The spars and struts looked thicker and stronger.

"Carol," I said. "Get me a file, would you? There are some in the garage."

She came back with two files and a hacksaw.

"Are you going to cut it down?" she asked hopefully.

"Darling, this is an original Drexel." I took one of the files. "I just want to convince myself that I'm not going insane."

I started cutting a series of small notches all over the statue, making sure they were exactly the width of the file apart. The metal was soft

and worked easily; on the surface there was a lot of rust but underneath it had a bright sappy glint.

"All right," I said when I had finished. "Let's go and have a drink."

We sat on the veranda and waited. I fixed my eyes on the statue and could have sworn that it didn't move. But when we went back an hour later the gondola had swung right round again, hanging down over us like an immense metal mouth.

There was no need to check the notch intervals against the file. They were all at least double the original distance apart.

"Mr. Hamilton," Carol said. "Look at this."

She pointed to one of the spikes. Poking through the outer scale of chrome were a series of sharp little nipples. One or two were already beginning to hollow themselves. Unmistakably they were incipient sonic cores.

Carefully I examined the rest of the statue. All over it new shoots of metal were coming through: arches, barbs, sharp double helixes, twisting the original statue into a thicker and more elaborate construction. A medley of half-familiar sounds, fragments of a dozen overtures and symphonies, murmured all over it. The statue was well over twelve feet high. I felt one of the heavy struts, and the pulse was stronger, beating steadily through the metal, as if it were thrusting itself on to the sound of its own music.

Carol was watching me with a pinched and worried look.

"Relax," I said. "It's growing."



We went back to the veranda and watched.

By six o'clock that evening it was the size of a small tree. A spirited simultaneous rendering of Brahms's *Academic Festival Overture* and Rachmaninoff's *First Piano Concerto* trumpeted across the garden.

### III

"The strangest thing about it," Raymond said the next morning, raising his voice above the din, "is that it's still a Drexel."

"Still a piece of sculpture, you mean?"

"More than that. Take any section of it and you'll find the original motifs being repeated. Each vane, each helix has all the authentic Drexel mannerisms, almost as if she herself were shaping it. Admittedly, this penchant for the late Romantic composers is a little out of keeping with all that sitar twanging, but that's rather a good thing, if you ask me. You can probably expect to hear some Beethoven any moment now — the *Pastoral Symphony*, I would guess."

"Not to mention all five piano concertos — played at once," I said sourly. Raymond's loquacious delight in this musical monster out in the garden annoyed me. I closed the veranda windows, wishing that he himself had installed the statue in the living room of his downtown apartment. "I take it that it won't go on growing forever?"

Carol handed Raymond another Scotch. "What do you think we ought to do?"

Raymond shrugged. "Why worry?" he said airily. "When it starts tearing the house down cut it back. Thank God we had it dismantled. If this had happened in Vermilion Sands . . . ."

Carol touched my arm. "Mr. Hamilton, perhaps that's what Lorraine Drexel expected. She wanted it to start spreading all over the town, the music driving everyone crazy —"

"Careful," I warned her. "You're running away with yourself. As Raymond says, we can chop it up any time we want to and melt the whole thing down."

"Why don't you, then?"

"I want to see how far it'll go," I said. In fact my motives were more mixed. Clearly, before she left, Lorraine Drexel had set some perverse jinx at work within the statue, a bizarre revenge on us all for deriding her handiwork. As Raymond had said, the present babel of symphonic music had no connection with the melancholy cries the statue had first emitted. Had those forlorn chords been intended to be a requiem for her dead lover — or even, conceivably, the beckoning calls of a still unsundered heart? Whatever her motives, they had now vanished into this strange travesty lying across my garden.

I watched the statue reaching slowly across the lawn. It had collapsed under its own weight and lay on its side in a huge angular spiral, twenty feet long and about fifteen feet high, like the skeleton of a futuristic whale. Fragments of the *Nut-*

*cracker Suite* and Mendelssohn's *Italian Symphony* sounded from it, overlaid by sudden blaring excerpts from the closing movement of Grieg's *Piano Concerto*. The selection of these hack classics seemed deliberately designed to get on my nerves.

I had been up with the statue most of the night. After Carol went to bed, I drove my car, with Raymond, onto the strip of lawn next to the house and turned on the headlamps. The statue stood out almost luminously in the darkness, booming away to itself, more and more of the sonic cores budding out in the yellow glare of the lights. Gradually it lost its original shape; the toothed grills enveloped itself and then put out new struts and barbs that spiraled upward, each throwing off secondary and tertiary shoots in its turn. Shortly after midnight it began to lean and then suddenly toppled over.

By now its movement was cock-screw. The plinth had been carried into the air and hung somewhere in the middle of the tangle, revolving slowly, and the main foci of activity were at either end. The growth rate was accelerating. We watched a new shoot emerge. As one of the struts curved round a small knob poked through the flaking chrome. Within a minute it grew into a spur an inch long, thickened, began to curve and five minutes later had developed into a full-throated sonic core twelve inches long.

Raymond pointed to two of my neighbors standing on the roof of their houses a hundred yards away, alerted by the music carried across

to them. "You'll soon have everyone in *Vermilion Sands* out here. If I were you, I'd throw an acoustic drape over it."

"If I could find one of the size of a tennis court. It's time we did something, anyway. See if you can trace Lorraine Drexel. I'm going to find out what makes this statue go."

Using the hacksaw, I cut off a two-foot limb and handed it to Dr. Blackett, an eccentric but amiable neighbor who sometimes dabbled in sculpture himself. We walked back to the comparative quiet of the veranda. The single sonic cord emitted a few random notes, fragments from a quartet by Webern.

"What do you make of it?"

"Remarkable," Blackett said. He bent the bar between his hands. "Almost plastic." He looked back at the statue. "Definite circumutation there. Probably phototropic as well. Mhm, almost like a plant."

"Is it alive?"

Beckett laughed. "My dear Hamilton, of course not. How can it be?"

"Well, where is it getting its new material? From the ground?"

"From the air. I don't know yet, but I imagine it's rapidly synthesizing an allotropic form of ferrous oxide. In other words, a purely physical rearrangement of the constituents of rust." Blackett stroked his heavy brush moustache and stared at the statue with a dream-like eye. "Musically, it's rather curious — an appalling conglomeration of almost every bad note ever

composed. Somewhere the statue must have suffered some severe sonic trauma. It's behaving as if it had been left for a week in a railroad shunting yard. Any idea what happened?"

"Not really." I avoided his glance as we walked back to the statue. It seemed to sense us coming and began to trumpet out the opening bars of Elgar's *Pomp and Circumstance* march. Deliberately breaking step, I said to Blackett: "So in fact all I have to do to silence the thing is chop it up into two-foot lengths?"

"If it worries you. However, it would be interesting to leave it, assuming you can stand the noise. There's absolutely no danger of it going on indefinitely." He reached up and felt one of the spars. "Still firm, but I'd say it was almost there. It will soon start getting pulpy like an over-ripe fruit and begin to shred off and disintegrate, playing itself out, one hopes, with Mozart's *Requiem* and the finale of the *Goetterdämmerung*." He smiled at me, showing his strange teeth. "Die, if you prefer it."

However, he had reckoned completely without Lorraine Drexel.

#### IV

At six o'clock the next morning I was woken by the noise. The statue was now fifty feet long and crossing the flower beds on either side of the garden. It sounded as if a complete orchestra were performing some Mad Hatter's symphony out in the center of the lawn. At the far end, by the rockery, the

sonic cores were still working their way through the Romantic catalogue, a babel of Mendelssohn, Schubert and Grieg, but near the veranda the cores were beginning to emit the jarring and syncopated rhythms of Stravinsky and Stockhausen.

I woke Carol, and we ate a nervous breakfast.

"Mr. Hamilton!" she shouted. "You've got to stop it!" The nearest tendrils were only five feet from the glass doors of the veranda. The largest limbs were over three inches in diameter, and the pulse thudded through them like water under pressure in a fire hose.

When the first police cars cruised past down the road, I went into the garage and found the hacksaw.

The metal was soft, and the blade sank through it quickly. I left the pieces I cut off in a heap to one side, random notes sounding out into the air. Separated from the main body of the statue, the fragments were almost inactive, as Dr. Blackett had stated. By two o'clock that afternoon I had cut back about half the statue and got it down to manageable proportions.

"That should hold it," I said to Carol. I walked round and lopped off a few of the noisier spars. "Tomorrow I'll finish it off altogether."

I wasn't in the least surprised when Raymond called and said that there was no trace anywhere of Lorraine Drexel.

At two o'clock that night I woke as a window burst across the floor of my bedroom. A huge metal helix hovered like a claw through

the fractured pane, its sonic core screaming down at me.

A half-moon was up, throwing a thin gray light over the garden. The statue had sprung back and was twice as large as it had been at its peak the previous morning. It lay all over the garden in a tangled mesh, like the skeleton of a crushed building. Already the advance tendrils had reached the bedroom windows, while others had climbed over the garage and were sprouting downward through the roof, tearing away the galvanized metal sheets.

All over the statue thousands of sonic cores gleamed in the light thrown down from the window. At last in unison, they hymned out the finale of Bruckner's *Apocalyptic Symphony*.

I went into Carol's bedroom, fortunately on the other side of the house, and made her promise to stay in bed. Then I telephoned Raymond Mayo. He came round within an hour, an oxy-acetylene torch and cylinders he had begged from a local contractor in the back seat of his car.

The statue was growing almost as fast as we could cut it back, but by the time the first light came up at a quarter to six we had beaten it.

Dr. Blackett watched us slice through the last fragments of the statue. "There's a section down in the rockery that might just be audible. I think it would be worth saving."

I wiped the rust-stained sweat from my face and shook my head. "No. I'm sorry, but once is enough."

Blackett nodded in sympathy, and stared gloomily across the heaps of scrap iron which were all that remained of the statue.

Carol, looking a little stunned by everything, was pouring coffee and brandy. As we slumped back in two of the deck chairs, arms and faces black with rust and metal filings, I reflected wryly that no one could accuse the Fine Arts Committee of not devoting itself wholeheartedly to its projects.

I went off on a final tour of the garden, collecting the section Blackett had mentioned, then guided in the local contractor who had arrived with his truck. It took him and his two men an hour to load the scrap — an estimated ton and a half — into the vehicle.

"What do I do with it?" he asked as he climbed into the cab. "Take it to the museum?"

"No!" I almost screamed. "Get rid of it. Bury it somewhere, or better still, have it melted down. As soon as possible."

When they had gone Blackett and I walked round the garden together. It looked as if a shrapnel shell had exploded over it. Huge divots were strewn all over the place, and what grass that had not been ripped up by the statue had been tramped away by us. Iron filings lay on the lawn like dust, a faint ripple of lost notes carried away on the steepening sunlight.

Blackett bent down and scooped up a handful of grains. "Dragon's teeth. You'll look out of the window tomorrow and see the *B Minor Mass* coming up." He let it run out be-

tween his fingers. "However, I suppose that's the end of it."

He couldn't have been more wrong.

Lorraine Drexel sued us. She must have come across the newspaper reports and realized her opportunity. I don't know where she had been hiding, but her lawyers materialized quickly enough, waving the original contract and pointing to the clause in which we guaranteed to protect the statue from any damage that might be done to it by vandals, livestock or other public nuisance. Her main accusation concerned the damage we had done to her reputation — if we had decided not to exhibit the statue we should have supervised its removal to some place of safekeeping, not openly dismembered it and then sold off the fragments to a scrap dealer. This deliberate affront had, her lawyers insisted, cost her commissions to a total of at least fifty thousand dollars.

At the preliminary hearings we soon realized that, absurdly, our one big difficulty was going to be proving to anyone who had not been there that the statue had actually started growing. With luck we managed to get several postponements, and Raymond and I tried to trace what we could of the statue. All we found were three small struts, now completely inert, rusting in the sand on the edge of one of the junkyards in Red Beach. Apparently taking me at my word, the contractor had shipped the rest of the statue to a steel mill to be melted down.

Our only case now rested on what amounted to a plea of self-defense. Raymond and myself testified that the statue had started to grow, and then Blackett delivered a long homily to the judge on what he believed to be the musical shortcomings of the statue. The judge, a crusty and short-tempered old man of the hanging school, immediately decided that we were trying to pull his leg. We were finished from the start.

The final judgment was not delivered until ten months after we had first unveiled the statue in the center of Vermilion Sands, and the verdict when it came was no surprise.

Lorraine Drexel was awarded thirty thousand dollars.

"It looks as if we should have taken the pylon after all," I said to Carol as we left the courtroom. "Even the step-pyramid would have been less trouble."

Raymond joined us and we went out onto the balcony at the end of the corridor for some air.

"Never mind," Carol said bravely. "At least it's all over with."

The court building was a new one, and by an unpleasant irony ours had been the first case to be heard there. Much of the floor and plasterwork had still to be completed, and the balcony was untiled. I was standing on an exposed steel cross-beam; one or two floors down someone must have been driving a rivet into one of the girders, and the beam under my feet vibrated soothingly.

Then I noticed that there were no sounds of riveting going on any-

where, and that the movement under my feet was not so much a vibration as a low rhythmic pulse.

I bent down and pressed my hands against the beam. Raymond and Carol watched me curiously. "Mr. Hamilton, what is it?" Carol asked when I stood up.

"Raymond," I said. "How long ago did they first start on this building? The steel framework, anyway?"

"Four months, I think. Why?"

"Four." I nodded slowly. "Tell me, how long would you say it took any random piece of scrap iron to be reprocessed through a steel mill and get back into circulation?"

"Years, if it lay around in the wrong junkyards."

"But if it had actually arrived at the steel mill?"

"A month or so. Less."

I started to laugh, pointing to the girder. "Feel that! Go on, feel it!"

Frowning at me, they knelt down and pressed their hands to the girder. Then Raymond looked up at me.

I stopped laughing. "Did you feel it?"

"Feel it?" Raymond repeated. "I can hear it. Lorraine Drexel — the statue. It's here!"

Carol was patting the girder and listening to it. "I think it's humming," she said, puzzled. "It sounds like the statue."

When I started to laugh again Raymond held my arm. "Snap out of it, the whole building will be singing soon!"

"I know," I said weakly. "And it won't be just this building either." I took Carol by the arm. "Come on, let's see if it's started."

## V

We went up to the top floor. The plasterers were about to move in, and there were trestles and laths all over the place. The walls were still bare brick.

We didn't have to look very far.

Utting out from one of the steel joists below the roof was a long metal helix, hollowing itself slowly into a delicate sonic core. Without moving, we counted a dozen others. A faint twanging sound come from them, like early arrivals at a rehearsal of some vast orchestra of sitar players, seated on every plain and hilltop of the Earth.

"An authentic Drexel," I said. "All the mannerisms. Nothing much to look at yet, but wait till it really gets going."

Raymond wandered round, his mouth open. "It'll tear the building apart. Just think of the noise."

Carol was staring up at one of the shoots. "Mr. Hamilton, you said they'd melted it all down."

"They did, angel. So it got back into circulation, touching off all the other metal it came into contact with. Lorraine Drexel's statue is here, in this building, in a dozen other buildings, in ships and planes . . ."

"They'll stop it," Carol said.

"They might," I admitted. "But it'll probably get back again somehow. A few pieces always will." I put my arm round her waist and began to dance to the strange abstracted music, for some reason as beautiful now as Lorraine Drexel's wistful eyes. "Did you say it was all over? Carol, it's only just beginning. The whole world will be singing!" END

# FRIDAY AT THE FANOCLASTS

by LIN CARTER

*Our Man in Fandom takes us to a typically non-typical fan club meeting*

Ever wonder what *actually* happens at a fan club meeting — what the fans do — what they talk about? Those of you who aren't lucky enough to live within "visiting distance" of a fanclub may be curious as to the exact goings-on. I thought that this month I'd sort of take you on a guided tour of a fanclub. So come along with Your Man In Fandom, and we'll spend Friday night with the Fanoclasts, biggest and most active of the fanclubs here in New York City and one of the vital centers of Fandom today, as sponsor club to the 1967 World Science Fiction Convention, Nycon III.

The Fanoclasts are an informal crew, scorning club officers and constitutions and like that. Whoever throws open his apartment to the bunch is host to the club and as near to an officer as the Fanoclasts ever get. Rising science-fiction writer Ted White, an editor of

*The Magazine of Fantasy and Science Fiction*, is the current host. Every other Friday the group meets at his apartment in Brooklyn, starting about nine o'clock.

My wife, Noel, and I were among the first to get there. We put our coats in a corner and looked around. Ted has a ground-floor apartment, three rooms or so, and the living room was mostly given over to shelves. Ted has an admirable collection of pulp magazines, literally thousands of them, mostly science fiction; but there were also long ranks of several of the old superhero magazines: *Doc Savage*, *The Shadow*, *The Avenger* and that sort of thing. Another room held a wall packed solid with paperbacks, and I noticed a stack of Big Little Books piled in a corner. Ted's equally impressive collection of comic books must have been packed away somewhere, for I didn't see any around.

The living room also held Ted's

stereo and several paintings, modern, impressionistic things, as well as a cover sketch by Frank Frazetta and Jack Gaughan's Pop Art portrait of Ted. There were also some cats; on inquiring, I learned the Whites currently keep four kittens named Pooh Bear, Tigger, Kanga and Roo, as well as their parents, Aphrodite and Sinbad. I speculated aloud as to how this brood would get along with my own family of four dogs and eight puppies!

Among the first arrivals were Dick and Pat Lupoff and Dave and Cindy Van Arnam. The Lupoffs used to be hosts to the Fanoclasts when they had an apartment in New York. Since Dick's job with Xerox took them upstate to Poughkeepsie they get down rarely. Dick is the editor of Canaveral Press, the publishing affiliate of Biblo & Tannen, the booksellers; and he edited those recent hardcover editions of Edgar Rice Burroughs. Dick has also just become a science-fiction writer, selling his first novel to Lancer Books.

Dave Van Arnam has been collaborating with Ted on some science fiction and just sold a novel of his own to Belmont. We got to talking about the curious fact that whoever hosts the Fanoclasts for any length of time seems to turn pro, as Dick did and Dave too, for he briefly hosted the club. I was host myself for several months and have sold ten science-fiction novels myself to the paperbacks, so I agreed with the fact that this eerie phenomenon seems to actually work.

Ted put some light jazz on the

stereo, and Dave Van Arnam went out to bring back some soda and beer, and pretty soon people started to trickle in. The first I spoke to was a fan named Alex Panshin. Alex has sold a few stories to *Analog* and *Worlds of Tomorrow*, and he's written a booklength critical study of the fiction of Robert Heinlein. He hasn't yet been able to find a publisher, but he's still looking around.

Since Heinlein has been one of my favorite science-fiction writers for a good twenty years, we got to comparing notes on the books. I asked Alex what his top favorites were, and he named *Beyond This Horizon*, *Have Space Ship Will Travel* and one of the juveniles, perhaps *Red Planet*. His choice of these as Heinlein's best baffled me, for I would name *Methuselah's Children* and *Citizen of the Galaxy* and *Glory Road*, myself. MY choices seemed to baffle HIM too, so we failed to agreed.

I do hope his book gets published, though, I'd very much like to read it. The title is *Heinlein in Dimension*.

Meanwhile, Dave Van Arnam was passing out neatly mimeographed copies of his weekly one-page fan-mag, *First Draft* it was, in fact, the 154th weekly issue! I looked it over while my wife talked to Cindy and Pat Lupoff. Casual, chatty stuff, filled with Van Arnam's personal observations on various topics, such as Jackie Kennedy's announcement that she would write her own memoirs (seeing as how the Manchester project bombed out, in her estimation) and similar matters of the moment.



Several more Fanoclasts had arrived by this point. I said hello to Terry and Carol Carr, and to Lee Hoffman. Terry is one of the editors of Ace Books and has just done a hardcover anthology for Doubleday with the intriguing title, *Science Fiction For People Who Hate Science Fiction*. He sports one of the blackest, lushest beards in Fandom. Lee Hoffman has written a couple of Western novels and was telling us that she has just sold three science-fiction novels to Belmont.

"How did it happen?" I asked. She shrugged.

"I don't know. One morning at a completely ridiculous hour — like noon — I got this plot-idea and hopped out of bed to start writing it down . . ."

Across the room, Ted was talking to some young guys. Ted and Dave Van Arnam are co-chairmen of the 1967 Worldcon; and Ted was relating in his dry, precise way how they got a letter recently from the New York City Convention Bureau. The Bureau wanted information on Nycon III, saying some flying-saucer groups had asked for details on the science-fiction convention and might wish to attend.

"I wrote them that we did not wish any flying-saucer groups to attend, and that was that," he finished laconically.

Several young fans who read this column got me off in a corner and fired questions at me.

"Do you know where I can get a copy of *The Poetic Edda*?" one of them asked me unexpectedly. While I was telling him that this ancient

Icelandic mythological "bible" of the Norse religion is in print from the American-Scandinavian Foundation in English. I noticed science-fiction artist Jack Gaughan arriving. He came all the way from the hidden Plateau of Leng in the forbidden depths of trackless New Jersey, bearing the artwork for *Nycon Comics* #3. This fannish comicbook is one of the things you get when you join the Nycon, and it's one of the funniest things I've seen in years. I tried to disengage myself from the gaggle of question-askers so as to get a look at the latest *Nycon Comics*, but it wasn't easy.

Another fellow was asking me questions about Robert E. Howard. He had heard I was busy completing some fragmentary "King Kull" and "Conan" stories for Lancer Books, stories Robert E. Howard probably would have sent on to the old *Weird Tales* if he'd lived to finish them, but which were discovered after his death by his literary agent, Glenn Lord of Pasadena, Texas.

Ted changed records on the stereo, and I got free and began chuckling over Jack Gaughan's comic art. I noticed Ted was passing out, to a select few, copies of his new children's book *The Secret of the Marauder Satellite*, just published by Westminster Press. I saw him slip a copy to Terry Carr and to Jack Gaughan, who designed the book jacket.

The room was beginning to fill up by this time, and people were spilling over into the kitchen. The soft undercurrent of jazz made a sort of

counterpoint to the erratic currents of conversation. Ted was showing pasteups of pages from the Nycon's second Progress Report.

On the living room couch, Dick Lupoff was describing his Lancer novel, still untitled. It's a sort of sword & sorcery thing, but with overtones of time travel. As I came by, he was telling Lee Hoffman and others about a peculiar airship he had invented for the novel. It sounded to me rather like a mechanical grasshopper, operating on the pogo-stick principle: you start off taking wee little tiny hops in it, and every time it hits the ground it bounces higher and higher until after a while you are taking stupendous mile-high leaps over the landscape.

"Fantastic!" Lee laughed. Dick goggled with an expression of mock-indignation.

"Fantastic? That's the *hard science* in my story, I'll have you know," he protested.

It was nearly time for "The Avengers." The Fanoclasts have recently formed the habit of watching this tv show during club evenings. It seems to be a deeply ingrained habit, for although "The Avengers'" time was pre-empted this evening to make room for some awful feature on popular music called "The Song-makers," they went right on watching Channel 7 as if by force of habit.

Nothing bores me more than television, unless it's popular music; and the combination of the two drove me into the kitchen where I got into a conversation with Andy Porter. Andy has been "first reader"

for F&SF for some time now; and he told me, beaming with pride, that he has just been made some sort of associate editor of the magazine. We talked about various writers — I think I held forth on Keith Laumer, a writer I am particularly fond of — while Andy worked around to a pointed critique of the recent "Our Man In Fandom" columns he had seen.

In the front room Terry Carr and Jack Gaughan and Ted were talking about various matters, including how much they all liked Harlan Ellison; and Ted showed me around his study where he does most of his writing. I got into a conversation with Dave and Andy over Keith Laumer again; it happened that I had with me the Simon & Schuster hard-cover edition of Laumer's *The Great Time Machine Hoax*, which I had picked up that afternoon, and I was praising it to the skies.

Someone came up and asked me about the weird sonnet-sequence I wrote in imitation of H.P. Lovecraft's "Fungi from Yuggoth" and which was being intermittently serialized in the fanzine *Amra*. I told him another installment was in the works and passed along the news that August Derleth was interested in publishing these sonnets and the rest of my macabre verse in book form; Arkham House will do them under the title of *Dreams From R'lyeh*. We discussed *Amra*, George Scithers' admirable, entertaining, Hugo-winning fanzine for awhile, and then it was time for my wife and I to catch our train back to Long Island. . . .

END

# A BOWL BIGGER THAN EARTH

PHILIP JOSÉ FARMER

Illustrated by GAUGHAN

*He didn't remember how he had  
come to this planet. He only  
remembered that he was dead!*

I

No squeeze. No pain.  
*Death has a wide pelvis, he*  
thought — much later, when he had  
time to reflect.

Now he was screaming.

He had had an impression of

awakening from his deathbed, of be-  
ing shot outwards over the edge of  
a bowl bigger than Earth seen from  
a space capsule. Sprawling outwards,  
he landed on his hands and knees on  
a gentle slope. So gentle it was. He  
did not tear his hands and knees but  
slid smoothly onward and downward

on the great curve. The material on which he accelerated looked much like brass and felt frictionless. Though he did not think of it then — he was too panic-stricken to do anything but react — he knew later that the brassy stuff had even less resistance than oil become a solid. And the brass, or whatever it was, formed a solid seamless sheet.

The only break was in the center, where the sheet ended. There, far ahead and far below, the bowl curved briefly upward.

Gathering speed, he slipped along the gigantic chute. He tried to stay on his hands and knees; but, when he twisted his body to see behind him, he shifted his weight. Over he went onto his side. Squawling, he thrashed around, and he tried to dig his nails into the brass. No use. He met no resistance, and he began spinning around, around. He did see, during his whirlings, the rim from which he had been shoved. But he could see only the rim itself and, beyond, the blue cloudless sky.

Overhead was the sun, looking just like the Terrestrial sun.

He rolled over on his back and succeeded during the maneuver in stopping the rotations. He also managed to see his own body. He began screaming again, the first terror driven out and replaced by — or added to as a higher harmonic — the terror of finding himself in a sexless body.

Smooth. Projectionless. Hairless. His legs hairless, too. No navel. His skin a dark brown — like an Apache's.

Morfiks screamed and screamed,

and he gripped his face and the top of his head. Then he screamed higher and higher. The face was not the one he knew (the ridge of bone above the eyes and the broken nose were not there), and his head was smooth as an egg.

He fainted.

Later, although it could not have been much later, he came to his senses. Overhead was the bright sun and beneath him was the cool nonfriction.

He turned his face to one side, saw the same brass and had no sensation of sliding because he had no reference point. For a moment he thought he might be at the end of his descent. But on lifting his head he saw that the bottom of the bowl was closer, that it was rushing at him.

His heart was leaping in his chest as if trying to batter itself to a second death. But it did not fail. It just drove the blood through his ears until he could hear its roar even above the air rushing by.

He lowered his head until its back was supported by the brass, and he closed his eyes against the sun. Never in all his life (lives?) had he felt so helpless. More helpless than a newborn babe, who does not know he is helpless and who cannot think and who will be taken care of if he cries.

He had screamed, but no one was running to take care of him.

Downward he slipped, brass-yellow curving away on both sides of him, no sensation of heat against his back where the skin should have

burned off a long time ago and his muscles should now be burning.

The incline began to be less downward, to straighten out. He shot across a flat space which he had no means of estimating because he was going too fast.

The flatness gave away to a curving upwards. He felt that he was slowing down; he hoped so. If he continued at the same rate of speed, he would shoot far out and over the center of the bowl.

Here it came! The rim!

He went up with just enough velocity to rise perhaps seven feet above the edge. Then, falling, he glimpsed a city of brass beyond the people gathered on the shore of a river but lost sight of these in the green waters rushing up towards him directly below.

He bellowed in anguish, tried to straighten out, and flailed his arms and legs. In vain. The water struck him on his left side. Half-stunned, he plunged into the cool and dark waters.

By the time he had broken the surface again, he had regained his senses. There was only one thing to do. Behind him, the brassy wall reared at least thirty feet straight up. He had to swim to the shore, which was about four hundred yards away.

What if he had not been able to swim? What if he chose to drown now rather than face the unknown on the beach?

A boat was his answer. A flat-bottomed boat of brass rowed with brass oars by a brown-skinned man (man?). In the bow stood a similar

creature (similar? exactly alike) extending a long pole of brass.

The manlike thing in the bow called out, "Grab hold, and I'll pull you in."

Morfiks replied with an obscenity and began swimming toward the beach. The fellow with the pole howled, "A trouble-maker, heh? We'll have no antisocial actions here, citizen!"

He brought the butt of the pole down with all his strength.

It was then that Morfiks found that he was relatively invulnerable. The pole, even if made of material as light as aluminum and hollow, should have stunned him and cut his scalp open. But it had bounced off with much less effect than the fall into the river.

"Come into the boat," said the poleman. "*Or nobody here will like you.*"

## II

It was this threat that cowed Morfiks. After climbing into the boat, he sat down on the bench in front of the rower and examined the two. No doubt of it. They were twins. Same height (both were sitting now) as himself. Hairless, except for long curling black eyelashes. Same features. High foreheads. Smooth hairless brows. Straight noses. Full lips. Well developed chins. Regular, almost classical features, delicate, looking both feminine and masculine. Their eyes were the same shade of dark brown. Their skins were heavily tanned. Their bodies were slimly built and quite human except

for the disconcerting lack of sex, navel and nipples on the masculine chests.

"Where am I?" said Morfik. "In the fourth dimension?"

He had read about that in the Sunday supplements and some of the more easily digested.

"Or in Hell?" he added, which would have been his first question if he had been in his Terrestrial body. Nothing that had happened so far made him think he was in Heaven.

The pole rapped him in the mouth, and he thought that either the poleman was pulling his punches or else his new flesh was less sensitive than his Terrestrial. The last must be it. His lips felt almost as numb as when the dentist gave him novocaine before pulling a tooth. And his meager buttocks did not hurt from sitting on the hard brass.

Moreover, he had all his teeth. There were no fillings or bridges in his mouth.

"You will not use *that* word," said the poleman. "It's not nice, and it's not true. The protectors do not like that word and will take one hundred per cent effective measures to punish anybody responsible for offending the public taste with it."

"You mean the word beginning with H?" said Morfik cautiously.

"You're catching on fast, citizen."

"What do you call this . . . place?"

"Home. Just plain home. Allow me to introduce myself. I'm one of the official greeters. I have no name; nobody here does. Citizen is good enough for me and for you. However, being a greater doesn't make

me one whit better than you, citizen. It's just my job, that's all. We all have jobs here, all equally important. We're all on the same level, citizen. No cause for envy or strife."

"No name?" Morfik said.

"Forget that nonsense. A name means you're trying to set yourself apart. Now, you wouldn't think it was nice if somebody thought he was better than you because he had a name that was big in We-know-where, would you? Of course not."

"I'm here for . . . how long?" Morfik said.

"Who knows?"

"Forever?" Morfik said dismally.

The end of the pole butted into his lips. His head rocked back, but he did not hurt much.

"Just think of the present, citizen. Because that is all that exists. The past doesn't exist; the future can't. Only the present exists."

"There's no future?"

Again, the butt of the pole.

"Forget that word. We use it on the river when we're breaking in immigrants. But once on the shore, we're through with it. Here, we're practical. We don't indulge in fantasy."

"I get your message," Morfik said. He damped the impulse to leap at the poleman's throat. Better to wait until he found out what the setup was, what a man could or could not get away with.

The rower said, "Coming ashore, citizens."

Morfik noticed that the two had voices exactly alike, and he supposed his own was the same as theirs.

But he had a secret triumph. His voice would sound different to himself; he had that much edge on the bastards.

The boat nudged onto the beach, and Morfiks followed the other two onto the sand. He looked quickly behind him and now saw that there were many boats up and down the river. Here and there a body shot up over the rim of the brassy cliff and tumbled down into the waters as he had a few minutes ago.

Beyond the lip of the cliff rose the swell of the brass slide down which he had hurtled. The slide extended so far that he could not see the human figures that undoubtedly must be standing on the edge where he had stood and must just now be in the act of being pushed from behind. Five miles away, at least, five miles he had slid.

A colossal building project, he thought.

Beyond the city of brass rose another incline. He understood now that he had been mistaken in believing the city was in the middle of a bowl. As far as he could see, there was the river and the city and the cliffs and slides on both sides. And he supposed that there was another river on the other side of the city.

The city reminded him of the suburban tract in which he had lived on Earth. Rows on rows of square brass houses, exactly alike, facing each other across twenty-foot wide streets. Earth house was about twelve feet wide. Each had a flat roof and a door in front and back, a strip of windows which circled the house like a transparent belt.

There were no yards. A space of two feet separated each house from its neighbor.

A person stepped out of the crowd standing on the beach. This one differed from the others only in having a band of some black metal around the biceps of its right arm.

"Officer of the Day," it said in a voice exactly like the two in the boat. "Your turn will come to act in this capacity. No favorites here."

It was then that Morfits recognized the possibilities of individualism in voice, of recognizing others. Even if everybody had identical dimensions in larynxes and the resonating chambers of palate and nasal passages, they must retain their habits of intonation and choice of pitch and words. Also, despite identical bodies and legs, they must keep some of their peculiar gestures and methods of walking.

"Any complaints about treatment so far?" said the O.D.

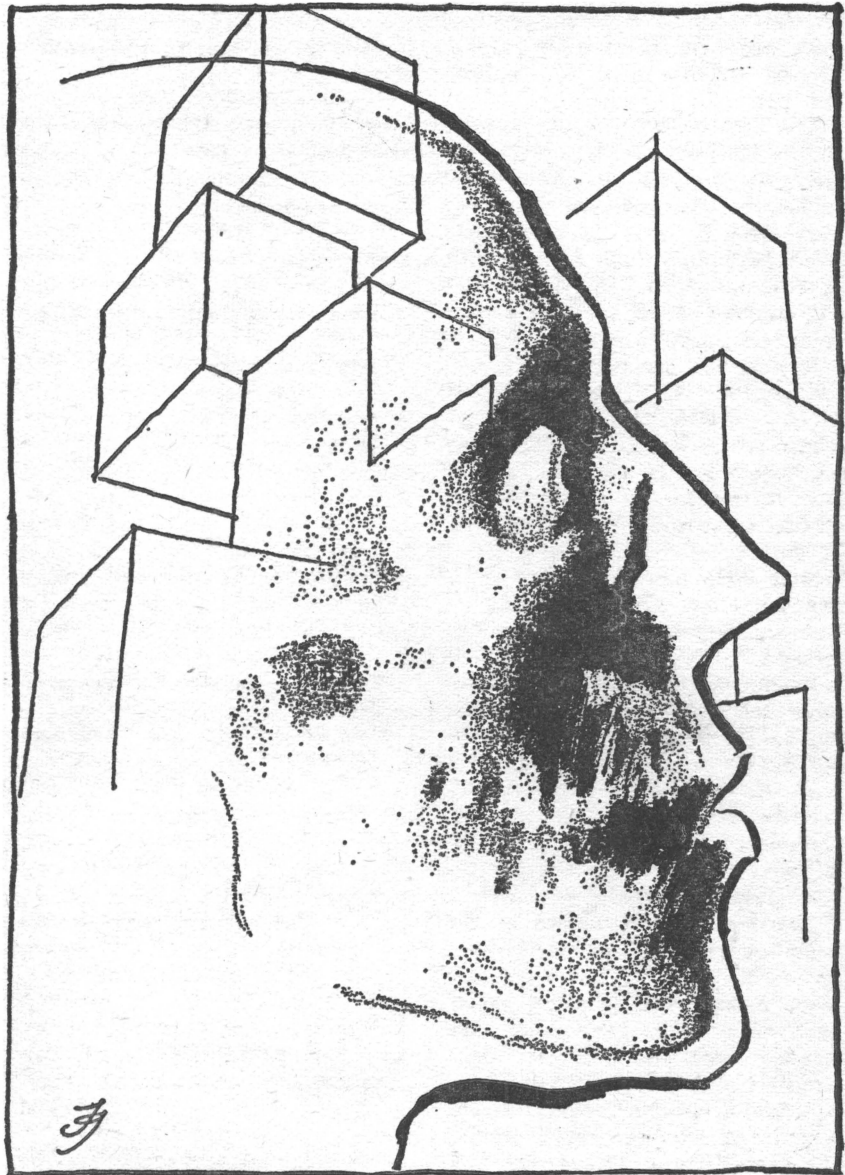
"Yes," said Morfiks. "This jerk hit me three times with its pole."

"Only because we love it," said the poleman. "We struck it — oh, very lightly! — to correct its ways. As a father — pardon the word — punishes a child he loves. Or an older brother his little brother. We are all brothers . . ."

"We are guilty of antisocial behavior," said the O.D. sternly. "We're very very sorry, but we must report this incident to the Protectors. Believe us, it hurt us . . ."

"Worse than it hurts us," said the poleman wearily. "We know."

"We'll have to add cynicism to the





charge," said the O.D. "K.P. for several months if we know the Protectors. Should anybody be guilty again —"

The O.D. told Morfiks to walk with it, and it briefed Morfiks as they went through the streets. These were made of a pale violet rubbery substance only slightly warm to the feet despite the sun beating down upon it. Morfiks would be given his own home. He was lord and master there and could do whatever he wished in it as long as he did not break any rules of public morality.

"You mean I can invite anybody I want to and can keep out anybody I want to?"

"Well, you can invite anybody you want. But don't throw anybody out who comes in uninvited. This is, unless the uninvited behaves antisocially. In which case, notify the O.D., and we'll notify a Protector."

"How can I be master of my house if I can't choose my guests?" Morfiks said.

"The citizen doesn't understand," said the O.D. "A citizen should not want to keep another citizen out of his house. Doing so is saying that a citizen doesn't love all citizens as brothers and sisters. It's not nice. We want to be nice, don't we?"

Morfiks replied that had always been known as a nice guy, and he continued to listen to the O.D. But, on passing an area where a large field coated with the violet rubber broke the monotonous rows of houses, he said, "Looks like a children's playground with all those swings, seesaws, games, trampolines. Where are the kids? And how —"

"Only the Protectors know what happens to the children who come from We-Know-Where," said the O.D. "It's better, much, much better, not to ask them about it. In fact, it's very good not to see or talk to a Protector."

"No, the playgrounds are for the amusement of us citizens. However, the Protectors have been thinking about taking them down. Too many citizens quarrel about who gets to use them, instead of amicably arranging precedence and turns. They actually dare to fight each other even if fighting's forbidden. And they manage, somehow, to hurt each other. We don't want anybody to get hurt, do we?"

"I guess not. What do you do for entertainment, otherwise?"

"First things first, citizen. We don't like to use any of the personal pronouns except *we*, of course, and *us* and *our* and *ours*. *I*, *me*, *they*, *you* all differentiate. Better to forget personal differences here, heh? After all, we're just one big happy family, heh?"

"Sure," Morfiks said. "But there must be times when a citizen has to point out somebody. How do I — we — identify someone guilty of, say, antisocial behavior?"

"It doesn't matter," said the O.D. "Point out anyone. Yourself — if you'll pardon the word — for instance. We all share in the punishment, so it makes no difference."

"You mean *I* have to be punished for someone else's crime? That isn't *fair*!"

"It may not seem so to us at first," said the O.D. "But consider. We're

brothers, not only under the skin but on the skin. If a crime is committed, the guilt is shared by all because, actually, all are responsible. And if punishment is given to all, then all will try to prevent crime. Simple, isn't it? And fair, too."

"But you — we — said that the poleman would be given K.P. Does that mean we all go on K.P.?"

"We did not commit a felony, only a misdemeanor. If we do it again, we are a felon. And we suffer. It's the only nice thing to do, to share, right?"

Morfiks did not like it. He was the one hit in the teeth, so why should he, the victim, have to take the punishment of the aggressor?

But he said nothing. He had gotten far on We-Know-Where by keeping his mouth shut. It paid off; everybody had thought he was a nice guy. And he *was* a nice guy.

There did seem to be one fallacy in the setup. If being a stool pigeon meant you, too, suffered, why turn anybody in? Wouldn't it be smarter to keep quiet and inflict the punishment yourself on the aggressor?

"Don't do it, citizen," said the O.D.

Morfiks gasped.

The O.D. smiled and said, "No, we can't read minds. But every immigrant thinks the same thing when told about the system. Keeping quiet only results in double punishment. The Protectors — whom this citizen has never seen face to face and doesn't want to — have some means of monitoring our behavior. They

know when we've been antisocial. The offender is, of course, given a certain amount of time in which to confess the injury. After that . . ."

To keep himself from bursting into outraged denunciation of the system, Morfiks asked more questions.

Yes, he would be confined to this neighborhood. If he traveled outside it, he might find himself in an area where his language was not spoken. That would result in his feeling inferior and different because he was a foreigner. Or, worse, superior. Anyway, why travel? Any place looked like every place.

Yes, he was free to discuss any subject as long as it did not concern We-Know-Where. Talking of *that* place led to discussions of — forgive the term — *one's* former identity and prestige. Besides, controversial subjects might arise and so lead to antisocial behavior.

Yes, this place was not constructed, physically, like We-Know-Where. The sun might be a small body; some eggheads had estimated it to be only a mile wide. The run orbited around the strip, which was composed of the slides, two rivers and the city between the rivers, all of which hung in space. There was some speculation that his place was in a pocket universe the dimensions of which were probably not more than fifty miles wide and twenty high. It was shaped like an intestine, closed at one end and open at the other to infinity — maybe.

At this point, the O.D. cautioned Morfiks about the perils of intellectual speculation. This could be a misdemeanor or felony. In any event,

eggheadedness was to be avoided. Pretending to be brainier than your neighbor, to question the unquestionable, was unegalitarian.

"There's no worry about that," Morfik said. "If there's anything hateful and despicable, it's eggheadedness."

"Congratulations on skill in avoiding the personal," said the O.D. "We'll get along fine here."

### III

**T**hey entered an immense building in which citizens were sitting on brass benches and eating off brass tables running the length of the building. The O.D. told Morfik to sit down and eat. Afterwards, Morfik could get to his new home, No. 12634, by asking directions. The O.D. left, and a citizen on K.P. served Morfik soup in a big brass bowl, a small steak, bread and butter, salad with garlic dressing and a pitcher of water. The utensils and cup were of brass.

He wondered where the food came from, but before he could ask, he was informed by a citizen on his right that he was not holding the spoon properly. After a few minutes of instruction and observation, Morfik found himself able to master etiquette as practiced here.

"Having the same table manners as everybody else makes a citizen a part of the group," said the instructor. "If a citizen eats differently, then a citizen is impolite. Impoliteness is antisocial. Get it?"

"Got it," said Morfik.

After eating, he asked the citizen

where he could locate No. 12634.

"We'll show us," said the citizen. "We live near that number."

Together, they walked out of the hall and down the street. The sun was near the horizon now. Time must go faster, he thought, for it did not seem to him that he had been here for more than a few hours. Maybe the Protectors sent the sun around faster so the days would be shorter.

They came to No. 12634, and Morfik's guide preceded him through swinging batwing doors into a large room with luminescent walls. There was a wide couchbed of the violet rubbery substance, several chairs cut out of solid blocks of the same stuff and a brass table in the center of the room. In one corner was a cubicle with a door. He investigated and found it to be the toilet. Besides the usual sanitary arrangements, the cubicle contained a shower, soap and four cups. There were no towels.

"After a shower, step outside, dry off in the sun," the guide said.

It looked at Morfik for such a long time that Morfik began to get nervous. Finally, the guide said, "I'll take a chance you're a pretty good Joe. What was your name on Earth?"

"John Smith," said Morfik.

"Play it cool, then," the guide said. "But you were a man? A male?"

Morfik nodded, and the guide said, "I was a girl. A woman, I mean. My name was Billie."

**"W**hy tell me this?" he demanded suspiciously.

Billie came close to Morfik's and put her hands on his shoulders.

"Listen, Johnny boy," she whispered. "Those bastards think they got us behind the eight ball by putting us into these neuter bodies. But don't you believe it. There's more than one way of skinning a cat, if you know what I mean."

"I don't," Morfik's said.

Billie came even closer; her nose almost touched his. A face in a mirror.

"Inside, you're just the same," said Billie. "That's one thing They can't change without changing you so much you're no longer the same person. If They do that, They aren't punishing the same person, are They? So, you wouldn't exist any more, would you? And being here wouldn't be fair, would it?"

"I don't get it," Morfik's said. He took a step backwards; Billie took a step forwards.

"What I mean is, you and me, we're still male and female inside. When They, whoever They are, stripped off our old bodies, They had to leave us our brains and nervous systems, didn't They? Otherwise, we'd not be ourselves, right? They fitted our nervous systems into these bodies, made a few adjustments here and there, like shortening or increasing nerve paths to take care of a stature different than the one you had on Earth. Or pumping something inside our skulls to take care of brains being too small for the skulls They gave us."

"Yeah, yeah," Morfik's said. He knew what Billie was going to propose, or he thought he did. He was

breathing hard; a tingle was running over his skin; a warmth was spreading out from the pit of his stomach.

"Well," said Billie, "I always heard that it was all in your head. And that's true. Of course, there's only so much you can do, and maybe it isn't as good as it was on You-Know-Where. But it's better than nothing. Besides, like they say, none of it's bad. It's all good, some is just better than others."

"You mean?"

"Just close your eyes," Billie crooned, "and imagine I'm a woman. I'll tell you how I looked, how I was stacked. And you think about it. Then you tell me how you looked, don't hold anything back, no need to be bashful here, describe everything down to the last detail. And I'll imagine how you were."

"Think it'll work?" Morfik's said.

Billie, her eyes closed, softly sang, "I know it will, baby. I've been around some since I came here."

"Yeah, but what about the punishment?"

Billie half-opened her eyes and said, scornfully, "Don't believe all that jazz, Johnny boy. Besides, even if They do catch you, it's worth it. Believe me, it's worth it."

"If only I thought I could put one over on Them," Morfik's said. "It'd be worth taking any risk."

Billie's answer was to kiss him. Morfik's, though he had to repress revulsion, responded. After all, it was only the bald head that made Billie look like a half-man.

They struggled fiercely and desperately; their kisses were as deep as possible.

**S**uddenly Morfiks pushed Billie away from him.

"It's worse than nothing," he panted. "I think something's going to happen, but it never quite does. It's no use. Now I feel awful."

Billie came towards him again, saying, "Don't give up so easy, honey. Rome wasn't erected in a day. Believe me, you can do it. But you got to have faith."

"No, I'm licked," Morfiks said. "Maybe if you did look like a woman, instead of just a carbon copy of me. Then . . . no, that wouldn't be any good. I'm just not designed for the job; neither are you. They got us where it hurts."

Billie lost her half-smile; her face twisted.

"Where it hurts!" she shrilled. "Let me tell you, Buster, if you can't get your kicks being a man here, you can by hurting somebody! That's about all that's left!"

"What do you mean?" Morfiks said.

Billie laughed loudly and long. When she mastered herself, she said, "I'll tell you one good thing about looking like everybody else. Nobody knows what you really are inside. Or what you were on Earth. Well, I'll tell you about myself.

"I was a man!"

Morfiks sputtered. His fists clenched. He walked towards Billy.

But he did not strike her . . . him . . . it.

Instead, he smiled, and he said, "Well, let me tell you something. My real name was Juanita."

Billy became pale, then red.

"You . . . you!"

**T**he next few days, Morfiks spent four hours each morning on the building of new houses. It was easy work. The walls and sections of the roof were brought in on wagons of brass pulled by citizens. Supervised by foremen, the laborers raised the walls, secured the bottoms to the brass foundation of the city with a quick-drying glue and then fastened the walls together by gluing down strips of the violet stuff at the corners of the walls.

Morfiks took his turn being a foreman for one day after he had gotten enough experience. He asked a citizen where the material for the houses and the rubber and the glue came from.

"And where's the food grown?"

The citizen looked around to make sure no one could hear them.

"The original brass sheets and rubber are supposed to have originated from the blind end of this universe," he said. "It's spontaneously created, flows like lava from a volcano."

"How can that be?" Morfiks said.

The citizen shrugged. "How should I know? But if you remember one of the theories of creation back on You-Know-Where, matter was supposed to be continuously created out of nothing. So if hydrogen atoms can be formed from nothing, why not brass and rubber lava?"

"But brass and rubber are organized configurations of elements and compounds!"

"So what? The structure of this universe orders it."

"And the food?"

"It's brought up on dumbwaiters

through shafts which lead down to the underside. The peasants live there, citizen, and grow food and raise some kind of cattle and poultry."

"Gee, I'd like that," Morfik said. "Couldn't I get a transfer down there? I'd like to work with the soil. It'd be much more interesting than this."

"If you were supposed to be a peasant, you'd have been transformed down there to begin with," the citizen said. "No, you're a city-dweller, brother, and you'll stay one. You predetermined that, you know, in You-Know-Where."

"I had obligations," Morfik said. "What'd you expect me to do, shirk them?"

"I don't expect nothing except to get out of here some day."

"You mean we can get out? How? How?"

"Not so loud with that *you*," the citizen growled. "Yeah, or so we heard, anyway. We never saw a corpse but we heard about some of us dying. It isn't easy, though."

"Tell me how I can do it," Morfik said. He grabbed the citizen's arm but the citizen tore himself loose and walked away swiftly.

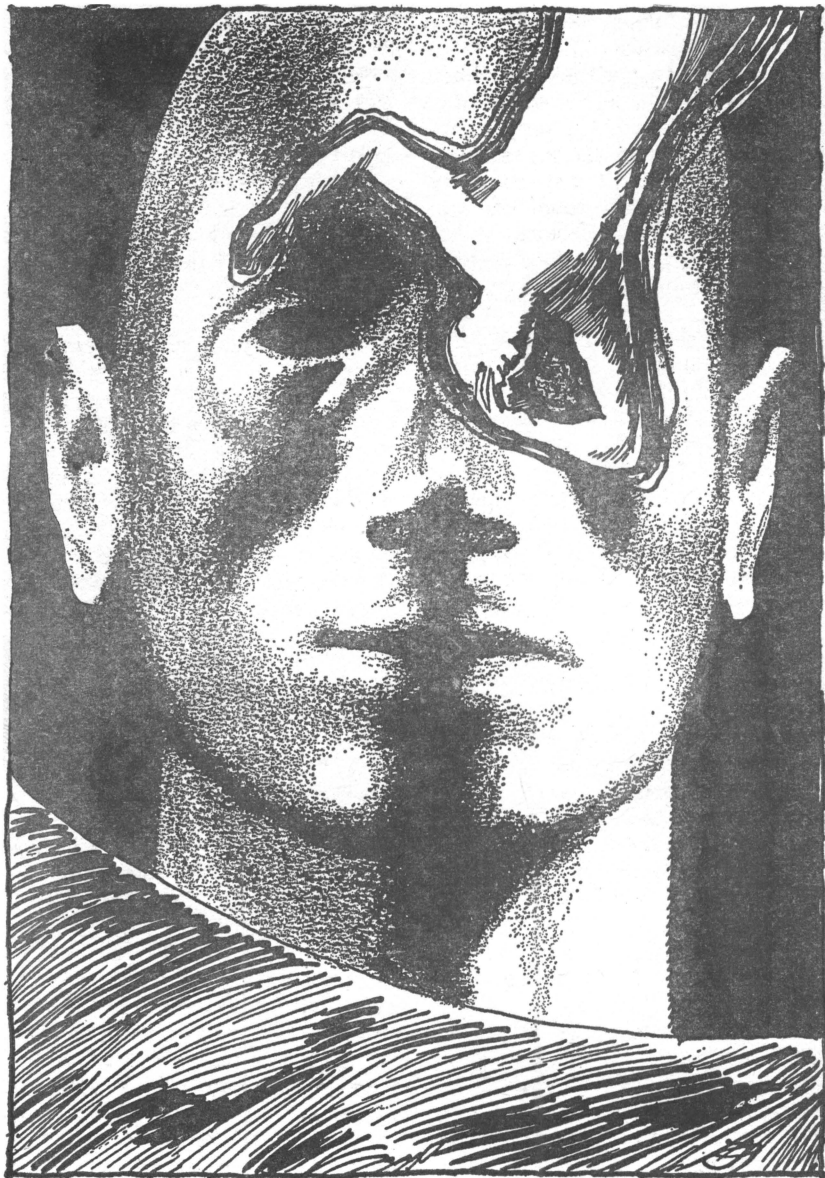
Morfik started to follow him, then could not identify him because he had mingled with a dozen others.

**I**n the afternoons, Morfik spent his time playing shuffleboard, badminton, swimming or sometimes playing bridge. The brass plastic cards consisted of two thicknesses glued together. The backs were

blank, and the fronts were punched with codes indicating the suits and values. Then, after the evening meals in the communal halls, there were always neighborhood committee meetings. These were to settle any disputes among the local citizens. Morfik could see no sense in them other than devices to keep the attendants busy and tire them out so that they would be ready to go to bed. After hours of wrangling and speech-making, the disputants were always told that the fault lay equally on both sides. They were to forgive each other, shake hands and make up. Nothing was really settled, and Morfik was sure that the disputants still burned with resentments despite their protestations that all was now well with them.

What Morfik found particularly interesting was the public prayer — if it could be called that — said by an O.D. before each meeting. It contained hints about the origins and reasons for this place and this life but was not specific enough to satisfy his curiosity.

"Glory be to the Protectors, who give us this life. Blessed be liberty, equality and fraternity. Praise be to security, conformity and certainty. None of these did we have on We-Know-Where, O Protectors, though we desired them mightily and strove always without success to attain them. Now we have them because we strove; inevitably we came here, glory be! For this cosmos was prepared for us and when we left that vale of slippery, slidery chaos, we squeezed through the walls and were formed in the template of passage,



given these bodies, sexless, sinless, suitable. O Mighty Protectors, invisible but everywhere, we know that We-Know-Where is the pristine cosmos, the basic world, dirty, many-aspected, chaos under the form of seeming order, evil but necessary. The egg of creation, rotten but generative. Now, O Protectors, we are shaped forever in that which we cried for on that other unhappy universe . . . ."

There was more but most of it was a repetition in different words. Morfiks, sitting in the brass pews, his head bowed, looked up at the smooth hemisphere of the ceiling and walls and the platform on which the O.D. stood. If he understood the O.D., he was bound here forever, immortal, each day like the next, each month an almost unvarying image of the preceding, year after year, century after century, millenia after millenia.

"Stability, Unseen but Everfelt Protectors. Stability! A place for everyone and everyone in a place!"

The O.D. was saying that there were such things as souls, a configuration of energy which exactly duplicated the body of the person when he had existed on We-Know-Where. It was undetectable by instruments there and so had been denied by many. But when one died there, the configuration was released from the attraction of the body, was somehow pushed from one universe into the next.

There were billions of these, all existing within the same space as the original universe but polarized and at angles to it. A "soul" went

to that universe for which it had the most attraction.

Indeed, the universe to which it traveled had actually been created by men and women. The total cumulative effect of desire for just such a place had generated this place.

If Morfiks interpreted the vague statements of the O.D. correctly, the structure of this universe was such that when a "soul" or cohesive energy configuration came through the "walls," it naturally took the shape in which all citizens found themselves. It was like hot plastic being poured into a mold.

Morfiks dared question a citizen who claimed to have been here for a hundred years. "The O.D. said all questions have been settled, everything is explained. What's explained? I don't understand any more about the origins or reasons for things here than I did on We-Know-Where."

"So what's new?" the citizen said. "How can you understand the un-understandable? The main difference here is that you don't ask questions. There are many answers, all true, to one question, and this place is one answer. So quit bugging me. You trying to get me — uh, us — into trouble? Hey, O.D.!"

Morfiks hurried off and lost himself in a crowd before he could be identified. He burned with resentment at the implications of this world. Why should he be here? Sure, on We-Know-Where he had stayed with one company for 20 years, he had been a good family man, a pal to his kids, a faithful husband, a pillar of the best church in the neigh-



borhood, had paid off his mortgages, joined the Lions, Elk, and Moose and the Masonic Lodge, the PTA, the Kiwanis, the Junior Chamber of Commerce and been a hard worker for the Democrats. His father before him had been a Democrat, and though he had had many misgivings about some of the policies, he had always followed the party line. Anyway, he was a right-wing Democrat, which made him practically the same thing as a left-wing Republican. He read the *Reader's Digest*, *Look*, *Life*, *Time*, *Wall Street Journal*, *Saturday Evening Post*, and had always tried to keep up with the best-sellers as recommended by the local newspaper reviewer. All this, not because he really wanted it but because he felt that he owed it to his wife and kids and for the good of society. He had hoped that when he went "over yonder" he would be rewarded with a life with more freedom, with a number of unlimited avenues for the things he really wanted to do.

What were those things? He didn't remember now, but he was sure that they were not what was available here.

"There's been a mistake," he thought. "I don't belong here. Everything's all screwed up. I shouldn't be here. This is an error on somebody's part. I got to get out. But how can I get out of here any more than I could get out of We-Know-Where? There the only way out was suicide and I couldn't take that, my family would have been disgraced. Besides, I didn't feel like it.

"And here I can't kill myself. My

body's too tough and there's nothing, no way for me to commit suicide. Drowning? That won't work. The river's too well guarded, and if you did slip by the guards long enough to drown, you'd be dragged out in no time at all and resuscitated. And then punished."

#### IV

On the fourth night, what he had been dreading happened. His punishment. He woke up in the middle of the night with a dull toothache. As the night went on, the ache became sharper. By dawn, he wanted to scream.

Suddenly, the batwings on his doorway flew open, and one of his neighbors (he presumed) stood in the room. He/she was breathing hard and holding his/her hand to his/her jaw.

"Did you do it?" said the neighbor in a shrill voice.

"Do what?" Morfiks said, rising from the couch-bed.

"Antisocial act," the intruder said. "If the culprit confesses, the pain will cease. After a while, that is."

"Did you do it?" Morfiks said. For all he knew, he might be talking to Billy again.

"Not me. Listen, newcomers often — always — commit crimes because of a mistaken notion a crime can't be detected. But the crime is always found out."

"There are newcomers who aren't born criminals," Morfiks said. Despite his pain, he intended to keep control to.

"Then you, and I mean *you*, won't confess?"

"The pain must be breaking some people apart," said Morfiks. "Otherwise, some wouldn't be using the second person singular."

"Singular, hell!" the citizen said, breaking two tabus with two words. "Okay, so it doesn't make much difference if you or me or the poor devil down the street did it. But I got a way of beating the game."

"And so bringing down more punishment on us?"

"No! Listen, I was a dental assistant on We-Know-Where. I know for a fact that you can forget one pain if you have a greater."

Morfiks laughed as much as his tooth would permit him, and he said, "So, what's the advantage there?"

The citizen smiled as much as his toothache would permit. "What I'm going to propose will hurt you. But it'll end up in a real kick. You'll enjoy your pain, get a big thrill out of it."

"How's that?" Morfiks said, thinking that the citizen talked too much like Billy.

"Our flesh is tough so we can't hurt each other too easily. But we can be hurt if we try hard enough. It takes perseverance, but then what doesn't that's worthwhile?"

The citizen shoved Morfiks onto the couch, and, before Morfiks could protest, he was chewing on his leg.

"You do the same to me," the citizen mumbled between bites. "I'm telling you, it's great! You've never had anything like it before."

Morfiks stared down at the bald

head and the vigorously working jaws. He could feel a little pain, and his toothache did seem to have eased.

He said, "Never had anything like what?"

"Like blood," the citizen said. "After you've been doing this long enough, you'll get drunk on it."

"I don't know. There, uh, seems something wrong about this."

The citizen stopped gnawing.

"You're a greenhorn! Look at it this way. The protectors tell us to love one another. So you should love me. And you can show your love by helping me get rid of this toothache. And I can do the same for you. After a while, you'll be like all of us. You won't give a damn; you'll do anything to stop the pain."

Morfiks got into position and bit down hard. The flesh felt rubbery. Then he stopped and said, "Won't we get another toothache tomorrow because of what we're doing now?"

"We'll get an ache somewhere. But forget about tomorrow."

"Yeah," Morfiks said. He was beginning to feel more pain in his leg. "Yeah. Anyway, we can always plead we were just being social."

The citizen laughed and said, "How social can you get, huh?"

Morfiks moaned as his crushed nerves and muscles began to bleed. After a while, he was screaming between his teeth, but he kept biting. If he was being hurt, he was going to hurt the citizen even worse.

And what the hell, he was beginning to feel a reasonable facsimile to that which he had known up there on We-Know-Where. **END**



# FAUST

The world of science does not admit the existence of demons — but the demons don't care!

**B**AINES, president of Consolidated Warfare Service, the munitions subsidiary of an international chemical and dye cartel, has applied to THERON WARE, a black magician of the highest repute, for a demonstration of his abilities. Accompanied by his executive assistant, JACK GINSBERG, a thorough-going skeptic, he visits Ware's rented palazzo in the Italian resort town of Positano, where Ware provides a minor exhibition of alchemy, changing two tears successively into blood, gold and lead under controlled circumstances.

This does not satisfy Baines, who has something much bigger in mind. Ware warns him that all magic, regardless of degree, is based upon the invocation of angels or demons — mostly the latter — and that it is

# ALEPH - NULL

by JAMES BLISH

Illustrated by Morrow

*expensive, dangerous and difficult. Baines already knows this from an earlier visit to Monte Albano, a sanctuary of white magicians. Strictly as a further test, Baines commissions Ware to procure by magic the death of the current Governor of California. Ware agrees. Ginsberg, a man of slightly odd tastes, is intrigued by Ware's obvious confidence and in a private interview attempts to ask a favor of the magician, but doesn't succeed in specifying what it is. Ware offers him the use of a succubus, but is refused.*

*At Monte Albano, the white magicians have divined something of the nature of Baines's forthcoming major commission and have reason to believe it may be a major disaster for the whole world. Under the terms of the Grand Covenant*

*under which all magic operates, they are entitled to impose upon Ware a white magician as an observer, providing that the white magician does not interfere in any way with Ware's operations. They choose FATHER DOMENICO, a suitably skilled and blameless man, who does not relish the assignment.*

*In the meantime, Baines, who has returned to Rome, receives news of the death of the Governor of California, as specified. He decides to return to Positano, taking with him this time not only Jack Ginsberg, but also a scientist of his firm, DR. ADOLPH HESS, also an observer.*

*Thanks to various delays en route, Baines, Ginsberg, Hess and Fr. Domenico all arrive for the next invocation of Hell at the same time — during the Christmas season.*

**F**ather Domenico's interview with Theron Ware was brief, formal and edgy. The monk, despite his apprehensions, had been curious to see what the magician looked like and had been irrationally disappointed to find him not much out of the ordinary run of intellectuals. Except for the tonsure, of course; like Baines, Fr. Domenico found that startling. Also, unlike Baines, he found it upsetting, because he knew the reason for it — not that Ware intended any mockery of his pious counterparts, but because demons, given a moment of inattention, were prone to seizing one by the hair.

"Under the Covenant," Ware told him in excellent Latin, "I have no choice but to receive you, of course, Father. And under other circumstances I might even have enjoyed discussing the Art with you, even though we are of opposite schools. But this is an inconvenient time for me. I've got a very important client here, as you've seen, and I've already been notified that what he wants of me is likely to be extraordinarily ambitious."

"I shan't interfere in any way," Fr. Domenico said. "Even should I wish to, which obviously I shall, I know very well that any such interference would cost me all my protections."

"I was sure you understood that, but nonetheless I'm glad to hear you say so," Ware said. "However, your very presence here is an embarrassment — not only because I'll have to explain it to my client, but also be-

cause it changes the atmosphere unfavorably and will make my operations more difficult. I can only hope, in defiance of all hospitality, that your mission will be speedily satisfied."

"I can't bring myself to regret the difficulty, since I only wish I could make your operations outright impossible. The best I can proffer you is strict adherence to the truce. As for the length of my stay, that depends wholly on what it is your client turns out to want and how long *that* takes. I am charged with seeing the matter through to its conclusion."

"A prime nuisance," Ware said. "I suppose I should be grateful that I haven't been blessed with this kind of attention from Monte Albano before; evidently what Mr. Baines intends is even bigger than he thinks it is. I conclude without much cerebration that you know something about it I don't know."

"It will be an immense disaster, I can tell you that."

"**H**mm. From your point of view, but not necessarily from mine, possibly. I don't suppose you're prepared to offer any further information — on the chance, say, of dissuading me?"

"Certainly not," Fr. Domenico said indignantly. "If eternal damnation hasn't dissuaded you long before this, I'd be a fool to hope I'd be able to."

"Well," Ware said, "but you are, after all, charged with the cure of souls; and unless the Church has done another flipflop since the last

Congress, it is still also a mortal sin to assume that any man is certainly damned — even me.”

That argument was potent, it had to be granted; but Fr. Domenico had not been trained in casuistry, and that by Jesuits, for nothing.

“I’m a monk, not a priest,” he said. “And any information I give you would, on the contrary, almost certainly be used to abet the evil, not turn it aside. I don’t find the choice a hard one under the circumstances.”

“Then let me suggest a more practical consideration,” Ware said. “I don’t know yet what Baines intends, but I do know well enough that I am not a Power myself — only an Agent. I have no desire to bite off more than I can chew.”

“Now you’re just wheedling,” Fr. Domenico said, with energy. “Knowing your own limitations is not an exercise at which I or anyone else can help you. You’ll just have to weigh them in the light of Mr. Baines’s commission, whatever that proves to be. In the meantime, I shall tell you nothing.”

“Very well,” Ware said, rising. “I will be a little more generous with my information, Father, than you have been with yours. I will tell you that you will be well advised to adhere to every letter of the Covenant. One step over the line, one toe, and *I shall have you* — and hardly any outcome in this world would give me greater pleasure. I’m sure I make myself clear.”

Fr. Domenico could think of no reply; but none seemed to be necessary.

As Ware had sensed, Baines was indeed disturbed by the presence of Fr. Domenico and made a point of bringing it up as the first order of business. After Ware had explained the monk’s mission and the Covenant under which it was being conducted, however, Baines felt somewhat relieved.

“Just a nuisance, as you say, since he can’t actually intervene,” he decided. “In a way, I suppose my bringing Dr. Hess here with me is comparable — he’s only an observer, too, and fundamentally he’s probably just as hostile to your world-view as this holier-than-us fellow is.”

“He’s not significantly holier than us,” Ware said with a slight smile. “I know something he doesn’t know, too; he’s in for a surprise in the next world. However, for the time being we’re stuck with him — for how long depends upon you. Just what is it you want this time, Mr. Baines?”

“Two things, one depending on the other. The first is the death of Albert Stockhausen.”

“The anti-matter theorist? That would be too bad; I rather like him, and besides, some of the work he does is of direct interest to me.”

“You refuse?”

“No, not immediately anyhow, but I’m now going to ask you what I promised I would ask on this occasion. What are you aiming at, anyhow?”

“Something very long-term. For the present, my lethal intentions for Dr. Stockhausen are strictly business-

based. He's nibbling at the edges of a scholium that my company presently controls completely. It's a monopoly of knowledge we don't want to see broken."

"Do you think you can keep anything secret that's based in natural law? After the McCarthy fiasco I should have supposed that any intelligent American would know better. Surely Dr. Stockhausen can't be just verging on some mere technicality — something your firm might eventually bracket with a salvo of process patents."

"No, it's in the realm of natural law and hence not patentable at all," Baines admitted. "And we already know that it can't be concealed forever. But we need about five years' grace to make the best use of it, and we know that nobody else but Stockhausen is even close to it. Barring accidents, of course. We ourselves have nobody of Stockhausen's caliber; we just fell over it, and somebody else might do that. However, that's highly unlikely."

"I see. Well . . . the project does have an attractive side. I think it's quite possible that I can persuade Father Domenico that this is the project he came to observe. Obviously it can't be — I've run many like it and never attracted Monte Albano's interest to this extent before — but given sufficient show of great preparations, and difficulty of execution, he might be deluded, and go home."

"That would be useful," Baines agreed. "The question is could he be deceived?"

"It's worth trying. The task would

in fact be difficult — and quite expensive."

"Why?" Jack Ginsberg said, sitting bolt upright in his carved Florentine chair so suddenly as to make his suit squeak against the silk upholstery. "Don't tell us he affects thousands of other people. Nobody ever cast any votes for him that I know of."

"Shut up, Jack."

"No, wait, it's a reasonable question," Ware said. "Dr. Stockhausen does have a large family, which I have to take into account. And, as I've told you, I've taken some pleasure in his company on a few occasions — not enough to balk at having him sent for, but enough to help run up the price."

"But that's not the major impediment. The fact is that Dr. Stockhausen, like a good many theoretical physicists these days, is a devout man — and furthermore, he has only a few venial sins to account for, nothing in the least meriting the attention of Hell. I'll check that again with Someone who knows, but it was accurate as of six months ago, and I'd be astonished if there's been any change. He's not a member of any formal congregation, but even so he's nobody a demon could reasonably have come for him — and there's a chance that he might be defended against any direct assault."

"Successfully?"

"It depends on the forces involved. Do you want to risk a pitched battle that would tear up half of Duesseldorf? It might be cheaper just to mail him a bomb."

"No, no. And I don't want anything that might look like some kind of laboratory accident — that'd be just the kind of clue that would set everybody else in his field haring after what we want to keep hidden. The whole secret lies in the fact that once Stockhausen knows what we know, he could create a major explosion with — well, with the equivalent of a blackboard and two pieces of chalk. Isn't there any other way?"

"Men being men, there's always another way. In this instance, though, I'd have to have him tempted. I know at least one promising avenue. But he might not fall; and even if he did, as I think he would, it would take several months and a lot of close monitoring. Which wouldn't be altogether intolerable either, since it would greatly help to mislead Father Domenico."

"What would it cost?" Jack Ginsberg said.

"Oh — say about eight million. Entirely a contingent fee this time, since I can't see that there'd be any important out-of-pocket money needed. If there is, I'll absorb it."

"That's nice," Jack said. Ware took no notice of the feeble sarcasm.

Baines put on his adjudicatory face, but inwardly he was well satisfied. As a further test, the death of Dr. Stockhausen was not as critical as that of Gov. Rogan, but it did have the merit of being in an entirely different social sphere; the benefits to Consolidated Warfare Service would be real enough, so that Baines had not had to counter-

feit a motive, which might have been detected by Ware and led to premature further questions; and finally, the objections Ware had raised, while in part unexpected, had been entirely consistent with everything the magician had said before, everything that he appeared to be, everything that his style proclaimed, despite the fact that he was obviously a complex man.

Good. Baines liked consistent intellectuals and wished that he had more of them in his organization. They were always fanatics of some sort when the chips were down, and hence presented him with some large and easily grasped handle precisely when he had most need of it. Ware hadn't exhibited his handle yet, but he would; he would.

"It's worth it," Baines said, without more than a decorous two seconds of apparent hesitation. "I do want to remind you, though, Dr. Ware, that Dr. Hess here is one of my conditions. I want you to allow him to watch while you operate."

"Oh, very gladly," Ware said, with another smile that, this time, Baines found disquieting. It seemed false, even unctuous, and Ware was too much in command of himself to have meant the falsity not to be noticed. "I'm sure he'll enjoy it. You can all watch, if you like. I may even invite Father Domenico."

## VIII

Dr. Hess arrived punctually the next morning for his appointment to be shown Ware's workroom and equipment. Greeting him with a



professional nod — "Coals to Newcastle, bringing Mitford and me up here for a tertiary," Hess found himself quoting in silent inanity — Ware led the way to a pair of heavy brocaded hangings behind his desk, which parted to reveal a heavy brass-bound door of what was apparently cypress wood. Among its fittings was a huge knocker with a face a little like the mask of tragedy, except that the eyes had cat-like pupils in them.

Hess had thought himself prepared to notice everything and be surprised by nothing, but he was taken aback when the expression on the knocker changed, slightly but inarguably, when Ware touched it. Apparently expecting his startlement, Ware said without looking at him: "There's nothing in here really worth stealing, but if anything were taken it would cost me a tremendous amount of trouble to replace it, no matter how worthless it would prove to the thief. Also, there's the problem of contamination. Just one ignorant touch could destroy the work of months. It's rather like a bacteriology laboratory in that respect. Hence the guardian."

"Obviously there can't be a standard supply house for your tools," Hess agreed, recovering his composure.

"No, that's not even theoretically possible. The operator must make everything himself — not as easy now as it was in the Middle Ages, when most educated men had the requisite skills as a matter of course. Here we go."

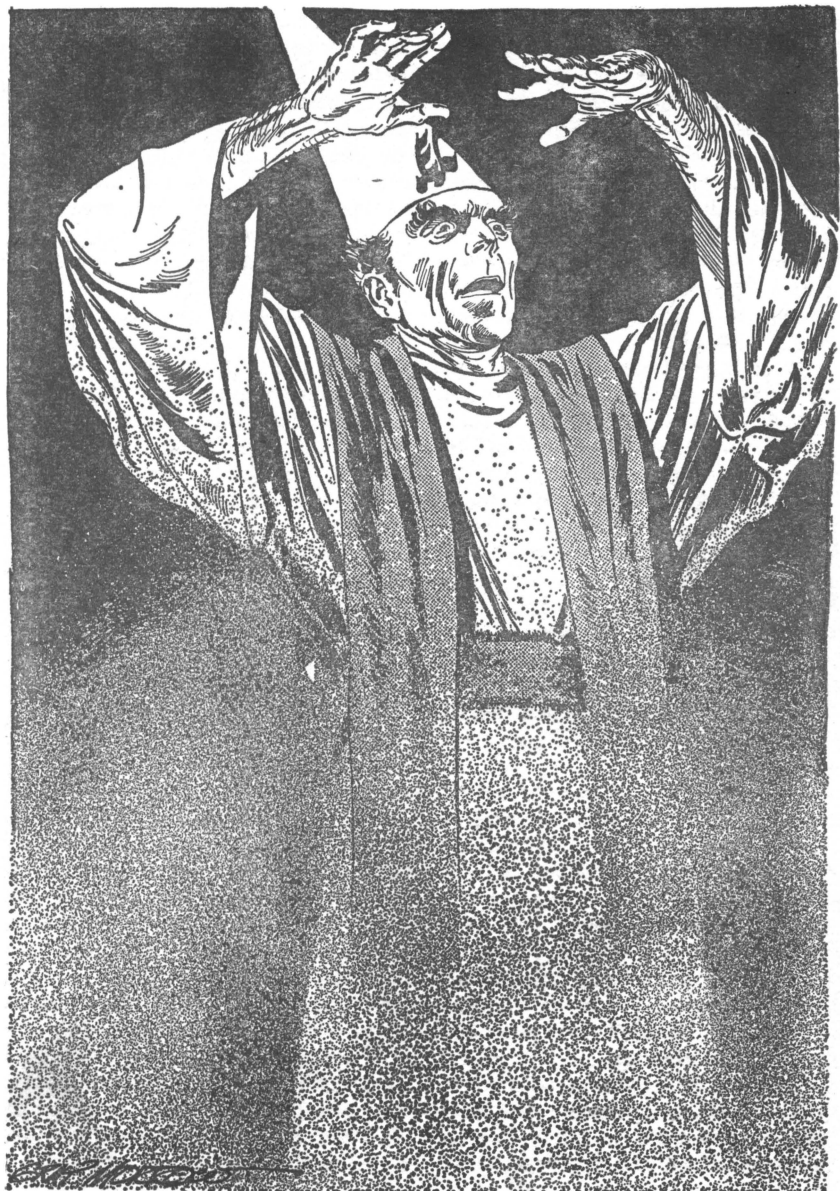
The door swung back as if being

opened from the inside, slowly and soundlessly. At first it opened on a deep scarlet gloom; but Ware touched a switch, and with a brief rushing sound, like water, sunlight flooded the room.

Immediately Hess could see why Ware had rented this particular palazzo and no other. The room was an immense refectory of Sienese design, which in its heyday must often have banqueted as many as thirty nobles; there could not be another one half as big in Positano, though the palazzo as a whole was smaller than some. There were mulioned windows overhead, under the ceiling, running around all four walls, and the sunlight was pouring through two ranks of them. They were flanked by pairs of red velvet drapes, unpatterned, hung from transverse rods; it had been these that Hess had heard pulling back when Ware had flipped the wall-switch.

At the rear of the room was another door, a broad one also covered by hangings, which Hess supposed must lead to a pantry or kitchen. To the left of this was a medium-sized modern electric furnace and beside it an anvil bearing a hammer which looked almost too heavy for Ware to lift. On the other side of the furnace from the anvil were several graduated tubs which obviously served as quenching baths.

To the right of the door was a black-topped chemist's bench, complete with sinks, running water and the usual nozzles for illuminating gas, vacuum and compressed air; Ware must have had to install his own pumps for all of these. Over



the bench on the back wall were shelves of reagents; to the right, on the side wall, ranks of drying pegs, some of which bore contorted pieces of glassware, others, coils of rubber tubing.

Farther along that wall toward the front was a lectern bearing a book as big as an unabridged dictionary, bound in red leather and closed and locked with a strap. There was a circular design chased in gold on the front of the book, but at this distance Hess could not make out what it was. The lectern was flanked by two standing candlesticks with fat candles in them. The candles had been extensively used, although there were shaded electric light fixtures around the walls, too, and the small writing table next to the lectern born a Tensor lamp. On the table was another book, smaller but almost as thick, which Hess recognized at once: the *Handbook of Chemistry and Physics*, 47th Edition, as standard a laboratory fixture as a test tube, and a rank of quill pens and inkhorns.

“Now you can see something of what I meant by requisite skills,” Ware said. “Of course I blow much of my own glassware, but any ordinary chemist does that. But should I need a new sword, for instance — ” he pointed toward the electric furnace — “I have to forge it myself; I couldn’t just pick one up at a costume shop. I’d have to do a good job of it, too. As a modern writer says somewhere, the only really serviceable symbol for a sharp sword is a *sharp* sword.”

“Uhm,” Hess said, continuing to look around. Against the left wall, opposite the lectern, was a long, heavy table, bearing a neat ranking of objects ranging in length from six inches to about three feet, all closely wrapped in red silk. The wrappers had writing on them, but again Hess could not decipher it. Beside the table, affixed to the wall, was a flat sword-cabinet. A few stools completed the furnishings; evidently Ware seldom worked sitting down. The floor was parqueted and, toward the center of the room, still bore traces of marks in colored chalks, considerably scuffed, which brought from Ware a grunt.

“The wrapped instruments are all prepared and I’d rather not expose them,” the magician said, walking toward the sword-rack, “but of course I keep a set of spares and I can show you those.”

He opened the cabinet door, revealing a set of blades hung in order of size. There were thirteen of them. Some were obviously swords; others looked more like shoemaker’s tools.

“The order in which you make these is important, too,” Ware said, “because as you can see, most of them have writing on them, and it makes a difference what instrument does the writing. Hence I began with the uninscribed instrument, this one, the bolline or sickle, which is also one of the most often used. Rituals differ, but the one I used requires starting with a piece of unused steel. It’s fired three times and then quenched in a mixture of magpie’s blood and the juice of a herb called foirole.”

"The *Grimorium Verum* says mole's blood and pimpernel juice," Hess observed.

"Ah, good, you've been doing some reading. I've tried that, and it just doesn't seem to give quite as good an edge."

"I should think you could get a still better edge by finding out what specific compounds were essential and using those," Hess said. "You'll remember that Damascus steel used to be tempered by plunging the sword into the body of a slave. It worked, but modern quenching baths are a lot better — and in your case you wouldn't have to be constantly having to trap elusive animals in large numbers."

"The analogy is incomplete," Ware said. "It would hold if tempering were the only end in view, or if the operation were only another observance of Paracelsus' rule, *Alterius non sit qui suus esse potest* — doing for yourself what you can't trust others to do. Both are practical ends that I might satisfy in some quite different way. But in magic the blood sacrifice has an additional function; what we might call the tempering of, not just the steel, but also the operator."

"I see. And I suppose it has some symbolic functions, too."

"In Goetic art, everything does. In the same way, as you probably also know from your reading, the forging and quenching is to be done on a Wednesday in either the first or the eighth of the day hours, or the third or the tenth of the night hours, under a full Moon. There is again an immediate practical interest be-

ing served here — for I assure you that the planetary hours do indeed affect affairs on Earth — but also a psychological one, the obedience of the operator in every step. The Grimoires and other texts are at best so confused and contradictory that it's never possible to know completely what steps are essential and what aren't, and research into the subject seldom makes for a long life."

"All right," Hess said. "Go on."

"Well, the horn handle has next to be shaped and fitted, again in a particular way at a particular hour and then perfected at still another day and hour. By the way, you mentioned a different steeping bath; if you use that ritual, the days and the hours are also different, and again the question is, what's essential and what isn't? Thereafter, there's a conjuration to be recited, plus three salutations and a warding spell; then the instrument is sprinkled, wrapped and fumigated — not in the modern sense, I mean it's perfumed — and is ready to use. After it's used, it has to be exorcised and rededicated, and that's the difference between the wrapped tools on the table and those hanging here in the rack.

"I won't go into detail about the preparation of the other instruments. The next one I make is the pen of the Art, followed by the inkpots and the inks, for obvious reasons; and, for the same reasons, the burin or graver. The pen is on my desk; this fitted needle here in the burin. The rest, going down the line as they hang here rather than in order of

manufacture, are the white-handled knife, which like the bolline is nearly an all-purpose tool; the black-handled knife, used almost solely for inscribing the circle; the stylet, chiefly for preparing the wooden knives used in tanning; the wand or blasting rod, which describes itself; the lancet, again self-descriptive; the staff, a restraining instrument analogous to a shepherd's; and lastly the four swords, one for the master, the other three for his assistants, if any."

Hess leaned forward, with a side glance at Ware for permission, to inspect the writing on the graven instruments. Some of them were easy enough to make out: on the sword of the master, for instance, the word MICHAEL appeared on the pommel, and on the blade, running from point to hilt, ELOHIM GIBOR. On the other hand, on the handle of the white-handled knife was engraved the following:

3N4)(E L J V Z 233

Hess pointed to this and to a different but equally baffling inscription which was duplicated on the handles of the stylet and the lancet. "What do those mean?"

"Mean? They can hardly be said to mean anything any more. They're greatly degenerate Hebrew characters, originally comprising various Divine Names. I could tell you what the Names were once, but the characters have no content any more — they just have to be there."

"Superstition," Hess said, recalling his earlier conversation with Baines,

interpreting Ware's remark about Christmas.

"Precisely, in the pure sense. The process is as fundamental to the Art as evolution is to biology. Now if you'll step this way I'll show you some other aspects that may interest you."

He led the way diagonally across the room to the chemist's bench, pausing to rub irritably at the chalk marks with the sole of his slipper. "I suppose a modern translation of that aphorism of Paracelsus," he said, "would be, 'You just can't get good servants any more.' Not to ply mops, anyhow . . . Now: most of these reagents will be familiar to you, but some of them are special to the Art. This, for instance, is exorcised water, which as you see I need in great quantities; it has to be river-water to start with. The quicklime is for tanning; some laymen, de Camp for instance, will tell you that 'virgin parchment' simply means parchment that's never been written on before, but that's not so — all the Grimoires insist that it must be the skin of a male animal which has never engendered, and the *Clavicula Salomonis* sometimes insists upon unborn parchment, or the caul of a newborn child. For tanning I also have to grind my own salt, after the usual rites are said over it. The candles I use have to be made of the first wax taken from a new hive, and so do my almadels. If I need images, I have to make them of earth dug up with my bare hands and reduced to a paste without any tool. And so on.

"I've mentioned aspersion and

fumigation, in other words sprinkling and perfuming. Sprinkling has to be done with an aspergillus, a bundle of herbs like a faggot or *bouquet garni*; the herbs differ from rite to rite, and you can see I've got a fair selection here — mint, marjory, rosemary, vervain, periwinkle, sage, valerian, ash, basil, hyssop. In fumigation the most commonly used scents are these: aloes, incense, mace, benzoin, storax; also, it's sometimes necessary to make a stench — for instance in the fumigation of a caul — and I've got quite a repertoire of those."

Ware turned away abruptly, nearly treading on Hess' toes, and strode toward the exit. Hess had no choice but to follow him.

"Everything involves special preparation," he said over his shoulder, "even including the firewood if I want to make ink for pacts. But there's no point in my cataloguing things further, since I'm sure you thoroughly understand the principles."

Hess scurried after, but he was still several paces behind the magician when the window-drapes swished closed and the red gloom was reinstated. Ware stopped and waited for him, and the moment he was through the door, closed it and went back to his seat behind the big desk. Hess, puzzled, walked around the desk and took one of the Florentine chairs reserved for guests or clients.

"Most illuminating," he said politely. "Thank you."

"You're welcome." Ware rested

his elbows on the desk and put his fingertips over his mouth, looking down thoughtfully. There was a sprinkle of perspiration over his brow and shaven head, and he seemed more than usually pale; also, Hess noticed after a moment, he seemed to be trying, without major effort, to control his breathing. Hess watched curiously, wondering what could have upset him. After only a moment, however, Ware looked up at him and volunteered the explanation, with an easy half-smile.

"Excuse me," he said. "From apprenticeship on, we're trained to secrecy. I'm perfectly convinced that it's unnecessary these days, and has been since the Inquisition died, but old oaths are the hardest to reason away. No discourtesy intended."

"No offense taken," Hess assured him. "However, if you'd rather rest —"

"No, I'll have ample rest in the next three days and be incommunicado too, preparing for Mr. Baines's commission. So if you've further questions, now's the time for them."

"Well . . . I have no further technical questions, for the moment. But I am curious about a question Baines asked you during your first meeting — I needn't pretend, I'm sure, that I haven't heard the tape. I wonder just as he did what your motivation is. I can see from what you've shown me, and from everything you've said, that you've taken colossal amounts of trouble to perfect yourself in your Art and that you believe in it; so it doesn't matter for the present whether or not I believe in

it, only whether or not I believe in you. And your laboratory isn't a sham; it isn't here solely for extortion's sake; it's a place where a dedicated man works at something he thinks important. I confess I came to scoff — and to expose you, if I could — and I still can't credit that any of what you do works, or ever did work. But I accept that you so believe."

Ware gave him a half-nod. "Thank you; go on."

"I've no farther to go but the fundamental question. You don't really need money; you don't seem to collect art or women; you're not out to be President of the World or the power behind some such person — and yet by your lights you have damned yourself eternally to make yourself expert in this highly peculiar subject. What on earth for?"

"I could easily duck that question," Ware said slowly. "I could point out, for instance, that under certain circumstances I could prolong my life to seven hundred years, and so might not be worrying just yet about what might happen to me in the next world.

"Or else I could easily point out what you already know from the texts, that every magician hopes to cheat Hell in the end — as several did who are now nicely ensconced on the calendar as authentic saints.

"But the real fact of the matter, Dr. Hess, is that I think what I'm after is worth the risk, and what I'm after is something you understand perfectly, and for which you've sold your own soul, or if you prefer an only slightly less loaded word,

your integrity, to Mr. Baines: *Knowledge*."

"Uhmh. Surely there must be easier ways —"

"You don't believe that. You think there may be more reliable ways, such as scientific method, but you don't think they're any easier. I myself have the utmost respect for scientific method, but I know that it doesn't offer me the kind of knowledge I'm looking for — which is also knowledge about the make-up of the universe and how it is run, but not a kind that any exact science can provide me with, because the sciences don't accept that some of the forces of nature are Persons. Well, but some of them are; and without dealing with those Persons I shall never know any of the things I want to know.

"This kind of research is just as expensive as underwriting a gigantic particle-accelerator, Dr. Hess, and obviously I'll never get any government to underwrite it. But people like Mr. Baines can, if I can find enough of them. Just as they underwrite you.

"Eventually, I may have to pay for what I've learned with a jewel no amount of money could buy. Unlike Macbeth, I know one *can't* 'skip the life to come.' But even if it does come to that, Dr. Hess — and probably it will — I'll take my knowledge with me, and it will have been worth the price.

"In other words — just as you suspected — I'm a fanatic."

To his own dawning astonishment, Hess said slowly:

"Yes. Yes, of course. So am I."

Father Domenico lay in his strange bed on his back, staring sleeplessly up at the pink stucco ceiling. Tonight was the night he had come for. Ware's three days of fasting, lustration and prayer — surely a blasphemous burlesque of such observances as the Church knew them, in intent if not in content — were over, and he had pronounced himself ready to act.

Apparently, he still intended to allow Baines and his two repulsive henchmen to observe the conjuration, but if he had ever had any intention of including Fr. Domenico in the ceremony, he had thought better of it. That was frustrating, as well as a great relief; but in his place, Fr. Domenico would have done the same thing.

Yet even here, excluded from the scene and surrounded by every protection he had been able to muster, Fr. Domenico could feel the preliminary oppression, like the dead weather before an earthquake. There was always a similar hush and tension in the air just before the invocation of one of the celestial powers, but with none of these overtones of maleficence and disaster . . . or would someone ignorant of what was actually proposed be able to tell the difference? That was a disquieting thought in itself, but one that could practically be left to Bishop Berkeley and the logical positivists. Fr. Domenico knew what was going on: a ritual of supernatural murder; and he could not help but tremble.

Somewhere in the palazzo there

was the silvery sound of a small clock striking, distant and sweet. The time was now 10:00 p.m., the fourth hour of Saturn on the day of Saturn, the hour most suitable — as even the blameless and pitiable Peter de Abano had written — for experiments of hatred, enmity and discord; and Fr. Domenico, under the Covenant, was forbidden even to pray for failure.

The clock, that two-handed engine that stands behind the Door, struck, and struck no more, and Ware drew the brocaded hangings aside.

Up to now, Baines despite himself had felt a little foolish in the girdled white linen garment Ware had insisted upon, but he cheered up upon seeing Jack Ginsberg and Dr. Hess in the same vestments. As for Ware, he was either comical or terrible, depending upon what view one took of the proceedings, in his white leather shoes lettered in cinnabar and his paper crown bearing the word EL. He was girdled with a belt about three inches wide which seemed to have been made from the skin of some hairy, lion-colored animal. Into the girdle was thrust a red-wrapped, scepterlike object which Baines identified tentatively from a prior description of Hess's as the wand of power.

"And now we must vest ourselves," Ware said, almost in a whisper. "Dr. Baines, on the desk you will find three garments. Take one, and then another, and another; give two to Dr. Hess and Mr. Ginsberg; don the other yourself."



Baines picked up the huddle of cloth. It turned out to be an alb.

"Take up your vestments and lift them in your hands above your heads. At the *Amen*, let them fall. Now:

"ANTON, AMATOR, EMITES, THE-  
ODONIEL, PONCOR, PAGOR, ANITOR;  
*by the virtue of these most holy angelic names do I clothe myself, O Lord of Lords, in my Vestments of Power, that so I may fulfill, even unto their term, all things which I desire to effect through Thee, IDEODANIACH, PAMOR, PLAIOR, Lord of Lords, Whose kingdom and rule endureth forever and ever. Amen.*"

The garments rustled down, and Ware opened the door.

The room beyond was only vaguely lit with yellow candle-light and at first bore almost no resemblance to the chamber Dr. Hess had described to Baines. As his eyes accommodated, however, Baines was gradually able to see that it was the same room, its margins now indistinct and its furniture slightly differently ordered; only the lectern and the candlesticks — there were now four of them, not two — were moved out from the walls and hence more or less visible.

But it was still confusing, a welter of flickering shadows and slightly sickening perfume, most unlike the blueprint of the room that Baines had erected in his mind from Hess's drawing. The thing that dominated the real room itself was also a drawing, not any piece of furniture or detail of architecture: a vast double circle on the floor in what appeared to be whitewash. Between the con-

centric circles were written innumerable words, or what might have been words, in characters which might have been Hebrew, Greek, Etruscan or even Elvish for all Baines could tell; some few were also in Roman lettering, but they too were names he could not recognize; and around the outside of the outer circle were written astrological signs in their zodiacal order, but with Saturn to the north.

At the very center of this figure was a rule square about two feet on a side, from each corner of which proceeded chalk, conventionalized crosses which did not look in the least Christian. Proceeding from each of these, but not connected to them, were four six-pointed stars, verging on the innermost circle. The stars at the east, west and south each had a Tau scrawled at its center; presumably the Saturnmost did too, but if so it could not be seen, for the heart of that emplacement was hidden by what seemed to be a fat puddle of stippled fur.

Outside the circles, at the other compass-points, were drawn four pentagrams, in the chords of which were written TE TRA GRAM MA TON, and at the centers of which stood the candles. Farthest away from all this — about two feet outside the circle and three feet over it to the north — was a circle enclosed by a triangle, also much lettered inside and out; Baines could just see that the characters in the angles read, NI CH EL.

"Tanists," Ware whispered, pointing into the circle, "take your places."

He went toward the long table Hess had described and vanished in the gloom. As instructed, Baines walked into the circle and stood in the western star; Hess followed, taking the eastern; and Ginsberg, very slowly, crept into the southern. To the north, the puddle of fur revolved once widdershins and resettled itself with an unsettling sigh, making Jack Ginsberg jump. Baines inspected it belatedly. Probably it was only a cat, as was supposed to be traditional, but in this light it looked more like a badger. Whatever it was, it was obscenely fat.

Ware reappeared, carrying a sword. He entered the circle, closed it with the point of the sword, and proceeded to the central square, where he lay the sword across the toes of his white shoes; then he drew the wand from his belt and unwrapped it, laying the red silk cloth across his shoulders.

"From now on," he said, in a normal, even voice, "no one is to move."

From somewhere inside his vestments, he produced a small crucible, which he set at his feet before the recumbent sword. Small blue flames promptly began to rise from the bowl, and Ware cast incense into it. He said:

"Holocaust. Holocaust. Holocaust."

The flames in the brazier rose slightly.

"We are to call upon MARCHOSIAS, a great marquis of the Descending Hierarchy," Ware said in the same conversational voice. "Before he

fell, he belonged to the Order of Dominations among the angels and thinks to return to the Seven Thrones after twelve hundred years. His virtue is that he gives true answers. Stand fast, all."

With a sudden motion, Ware thrust the end of his rod into the surging flames of the brazier. At once, the air of the hall rang with a long, frightful chain of woeful howls. Above the bestial clamor, Ware shouted:

"I abjure thee, great MARCHOSIAS, as the agent of the Emperor LUCIFER, and of his beloved son LUCIFUGE ROFOCALE, by the power of the pact I have with thee, and by the Names ADONAY, ELOIM, JEHOVAM, TAGLA, MATHON, ALMOUZIN, ARIOS, PITHONA, MAGOTS, SYLPHAE, TABOTS, SALAMANDRAE, GNOMUS, TERRAE, COELIS, GODENS, AQUA, and by the whole hierarchy of superior intelligences who shall constrain thee against they will, *venite, venite, submiritillor* MARCHOSIAS!"

The noise rose higher, and a green steam began to come off the brazier. It smelt like someone was burning hart's horn and fishgall. But there was no other answer. His face white and cruel, Ware rasped over the tumult:

"I adjure thee, MARCHOSIAS, by the pact, and by the Names, appear instantler!" He plunged the rod a second time into the flames. The room screamed; but still there was no apparition.

"Now I adjure thee, LUCIFUGE ROFOCALE whom I command, as the agent of the Lord and Emperor of Lords, send me thy messenger

MARCHOSIAS, forcing him to forsake his hiding-place, wheresoever it may be; and warning thee — "

The rod went back into the fire. Instantly, the palazzo rocked as though the earth had moved under it.

"Stand fast!" Ware said hoarsely.

Something Else said:

HUSH, I AM HERE. WHAT DOST THOU SEEK OF ME? WHY DOST THOU DISTURB MY REPOSE? LET MY FATHER REST, AND HOLD THY ROD.

Never had Baines heard a voice like that before. It seemed to speak in syllables of burning ashes.

"Hadst thou appeared when first I invoked thee, I had by no means smitten thee, nor called thy father," Ware said. "Remember, if the request I make of thee be refused, I shall thrust again my rod into the fire."

THINK AND SEE!

The palazzo shuddered again. Then, from the middle of the triangle to the north-west, a slow cloud of yellow fumes went up toward the ceiling, making them all cough, even Ware. As it spread and thinned, Baines could see a shape forming under it; but he found it impossible to believe. It was — it was something like a she wolf, gray and immense, with green and glistening eyes. A wave of coldness was coming from it.

The cloud continued to dissipate. The she-wolf glared at them, slowly spreading her griffin's wings. Her serpent's tail lashed gently, scarily.

In the northern pentacle, the great cat sat up and stared back. The demon-wolf showed her teeth and

emitted a disgusting belch of fire. The cat settled its front feet indifferently.

"Stand, by the Seal," Ware said. "Stand and transform, else I shall plunge thee back whence thou camest. I command thee."

The she-wolf vanished, leaving behind in the triangle a modest-looking young man wearing a decorous necktie, a dildo almost as long, and nothing else. "Sorry, boss," he said in a sugary voice. "I had to try, you know. What's up?"

"Don't try to wheedle me, vision of stupidity," Ware said harshly, "Transform, I demand of thee, thou'rt wasting thy father's time, and mine! Transform!"

The young man stuck out his tongue, which was copper-green. A moment later, the triangle was occupied by a black-bearded man apparently twice his age, wearing a green robe trimmed in ermine and a glittering crown it hurt Baines's eyes to look at. An odor of sandalwood began slowly to diffuse through the room.

"That's better," Ware said. "Now I charge thee, by those Names I have named and on pain of those torments thou hast known, regard the likeness and demesne of that mortal whose eidolon I hold in my mind; and that when I release thee, thou shalt straightaway go unto him, not making thyself known unto him, but revealing as it were to come from his own intellectual soul a vision and understanding of that great and ultimate Nothingness which lurks behind those signs he



calls matter and energy, as thou wilt see it in his private forebodings; and that thou remainest with him and deepen his despair without remittal, until such time as he shall despise his soul for its endeavors, and destroy the life of his body."

"I cannot give thee," the crowned figure said, in a voice deep but somehow lacking all resonance, "what thou requirest."

"Refusal will not avail thee," Ware said, "for either shalt thou go incontinently and perform what I command, or I shall in no wise dismiss thee, but shall keep thee here unto my life's end and torment thee daily, as thy father permitteth."

"Thy life itself, though it last seven hundred years, is but a day to me," said the crowned figure. Sparks issued from its nostrils as it spoke. "And thy torments but a farthing of those I have endured since ere the cosmic egg was hatched and Eve invented."

For answer, Ware again stabbed the rod into the fire, which, Baines noted numbly, failed even to scorch it. But the crowned figure threw back its bearded head and howled desolately. Ware withdrew the rod, but only by a hand's breadth.

"I shall do as thou commandest," the creature said sullenly. Hatred oozed from it like lava.

"Be it not performed exactly, I shall call thee up again," Ware said. "But be it executed, for thy pay thou shalt carry off the immortal part of the subject thou shalt tempt, which is as yet spotless in the sight of Heaven, and a great prize."

"But not yet enough," said the

demon. "For thou must give me also somewhat of thine hoard, as it is written in the pact."

"Thou art slow to remember the pact," Ware said. "But I would deal fairly with thee, knowing marquis. Here."

He reached into his robe and drew out something minute and colorless which flashed in the candlelight. At first, Baines took it to be a diamond, but as Ware held it out, he recognized it as an opalescent crystal tear-vase, the smallest he had ever seen, stopper, contents and all. This Ware tossed, underneath, out of the circle to the fuming figure, which to Baines's new astonishment — for he had forgotten that what he was really looking at had first exhibited as a beast — caught it skillfully in its mouth and swallowed it.

"Thou dost only tantalize MARCHOSIAS," the presence said "When I have thee in Hell, magician, then shall I drink thee dry, though thy tears flow never so copiously."

"Thy threats are empty; I am not marked for thee, shouldst thou see me in Hell forthever," Ware said. "Enough, ungrateful monster; cease thy witless plaudering and discharge thine errand; I dismiss thee."

The crowned figure snarled and then, suddenly, reverted to the form in which it had first showed itself. It vomited a great gout of fire, but the surge failed to pass the wall of the triangle; instead, it collected in a ball around the demon itself. Nevertheless, Baines could feel the heat against his face.

He raised his wand methodically.

The floor inside the small circle vanished. The apparition clashed its brazen wings and dropped like a stone. With a rending thunderclap, the floor healed seamlessly.

Then there was silence. As the ringing in Baines's ears died away, he became aware of a distant thrumming sound, as though someone had left a car idling in the street in front of the palazzo. Then he realized what it was: the great cat was purring. It had watched the entire proceedings with nothing more than grave interest. So, apparently, had Hess. Ginsberg seemed to be jittering, but he was standing his ground. Although he had never seen Jack rattled before, Baines could hardly blame him; he himself felt sick and giddy, as though just the effort of looking at MARCHOSIAS had been equivalent to having scrambled for days up some Himalayan glacier.

"It is over," Ware said in a gray whisper. He looked very old. Taking up his sword, he cut the diagram circle with it. "Now we must wait. I will be in seclusion for two weeks; then we will consult again. The circle is open; you may leave."

Father Domenico heard the thunderclap, distant and muffled, and knew that the sending had been made — and that he was forbidden, now as before, even to pray for the soul of the victim (or the patient, in Ware's antiseptic Aristotelian terminology). Sitting up and swinging his feet over the edge of the bed, breathing with difficulty in the musky, detumescent air, he walked

unsteadily to his satchel and opened it.

Why — that was the question — did God so tie his hands, why did He allow such a compromise as the Covenant at all? It suggested, at least, some limitation in His power unallowable by the firm dogma of Omnipotence, which it was a sin even to question; or at worst, some ambiguity in His relationship with Hell, one quite outside the revealed answers to the Problem of Evil.

That last was a concept too terrible to bear thinking about. Probably it was attributable purely to the atmosphere here; in any event, Fr. Domenico knew that he was in no spiritual or emotional condition to examine it now.

He could, however, examine with possible profit a minor but related question: Was the evil just done the evil Fr. Domenico had been sent to oversee? There was every immediate reason to suppose that it was — and if it were, then Fr. Domenico could go home tomorrow, ravaged but convalescent.

On the other hand, it was possible — dreadful, but in a way also hopeful — that Fr. Domenico had been commanded to Hell-mouth to await the emission of something worse. That would resolve the puzzling anomaly that Ware's latest undertaking, abominable though they all were, was for Ware not unusual. Much more important, it would explain, at least in part, why the Covenant existed at all: in Tolstoi's words, "God sees the truth, but waits."

And this question, at least, Fr.

Domenico need not simply ponder, but could actively submit to the Divine guidance, even here, even now, provided that he call upon no Presences. That restriction was not prohibitive; what was he a magician for, if not to be as subtle in his works as in his praise?

Ink-horn, quill, straight-edge, three different disks of different sizes cut from virgin cardboard — not an easy thing to come by — and the wrapped burin came out of the satchel and were arranged on top of his dresser, which would serve well enough for a desk. On the cardboard disks he carefully inscribed three different scales: The A camerae of sixteen divine attributes, from *bonitas* to *patientia*; the T camerae of thirty attributes of things, from *temporis* to *negatio*; and the E camerae of the nine questions, from *whether* to *how great*. He centerpunched all three disks with the burin, pinned them together with a cufflink, and finally asperged the assembled Lull Engine with holy water from the satchel. Over it he said:

"I conjure thee, O form of this instrument, by the authority of God the Father Almighty, by the virtue of Heaven and the stars, by that of the elements, by that of stones and herbs, and in like manner by the virtue of snowstorms, thunder and winds, and belike also by the virtue of the *Ars magna* in whose figure thou art drawn, that thou receive all power unto the performance of those things in the perfection of which we are concerned, the whole without trickery, falsehood or deception, by the command of God,

Creator of the Angels and Emperor of the Ages. DAMAHII, LUMECH, GADAL, PANCIA, VELOAS, MEOROD, LAMIDOCH, BALDACH, ANERETHON, MITRATON, most holy angels, be ye wardens of this instrument. *Domine, Deus meus, in te speravi . . . Confitebor tibi, Domine, in toto corde meo . . . Quemadmodum desiderat cervus ad fontes aquarum . . . Amen.*"

This said, Fr. Domenico took up the engine and turned the circles against each other. Lull's great art was not easy to use; most of the possible combinations of any group of wheels were trivial, and it took reason to see which were important, and faith to see which were inspired. Nevertheless, it had one advantage over all other forms of scrying: it was not, in any strict sense, a form of magic.

He turned the wheels at random the required number of times, and then, taking the outermost by its edge, shook it to the four quarters of the sky. He was almost afraid to look at the result.

But on that very first essay, the engine had generated:

PATIENCE / BECOMING / REALITY

It was the answer he had both feared and hoped for. And it was, he realized with a subdued shock, the only answer he could have expected on Christmas Eve.

He put the engine and the tools back in his satchel and crept away into the bed. In his state of over-exhaustion and alarm, he did not expect to sleep . . . but within two turns of the glass he was no longer

in the phenomenal world, but was dreaming instead that, like Gerbert the magician-Pope, he was fleeing the Holy Office down the wind astride a devil.

X

Ware's period of recovery did not last quite as long as he had prophesied. He was visibly up and about by Twelfth Night. By that time, Baines — though only Jack Ginsberg could see and read the signs — was chafing at the inaction. Jack had to remind him that in any event at least two months were supposed to pass before the suicide of Dr. Stockhausen could even be expected and suggested that they all go back to Rome and to work in the interim.

Baines shrugged the suggestion off. Whatever else was on his mind, it did not seem to involve Consolidated Warfare Service's interests more than marginally . . . or at least, the thought of business could not distract him beyond the making of a small number of daily telephone calls.

The priest or monk or whatever he was, Fr. Domenico, was still in attendance too. Evidently he had not been taken in by the show. Well, that was Ware's problem, presumably. All the same, Jack stayed out of sight of the cleric as much as possible; having him around, Jack recalled in a rare burst of association with his Bronx childhood, was a little like being visited by a lunatically Orthodox relative during a crucial marriage brokerage.

Not so lunatic at that, though; for if magic really worked — as Jack had had to see that it did — then the whole tissue of metaphysical assumptions Fr. Domenico stood for, from Moses through the Kabbalah to the New Testament, had to follow, as a matter of logic. After this occurred to Jack, he not only hated to see Fr. Domenico, but had nightmares in which he felt that Fr. Domenico was looking back at him.

Ware himself, however, did not emerge officially, to be talked to, until his predicted fourteenth day. Then, to Jack's several-sided disquietude, the first person he called into his office was Jack Ginsberg.

Jack wanted to talk to Ware only slightly more than he wanted to talk to the bare-footed, silently courteous Fr. Domenico; and the effect upon Baines of Ware's singling Jack out for the first post-conjuration interview, though under ordinary circumstances it could have been discounted as minor, could not even be conjectured in Baines's present odd state of mind. After a troubled hour, Jack took the problem to Baines, not even sure any more of his own delicacy in juggling such an egg.

"Go ahead," was all Baines said. He continued to give Jack the impression of a man whose mind was not to be turned more than momentarily from some all-important thought. That was alarming, too, but there seemed to be nothing to be done about it. Setting his face into its business mold of pleasant attentiveness, over slightly clenched teeth, Jack marched up to Ware's office.



The sunlight there was just as bright and innocent as ever, pouring directly in from the sea-sky on top of the cliff. Jack felt slightly more in contact with what he had used to think of as real life. In some hope of taking the initiative away from Ware and keeping it, he asked the magician even before sitting down: "Is there some news already?"

"None at all," Ware said. "Sit down, please. Dr. Stockhausen is a tough patient, as I warned you all at the beginning. It's possible that he won't fall at all, in which case a far more strenuous endeavor will be required. But in the meantime I'm assuming that he will, and that I therefore ought to start preparing for Dr. Baines's next commission. That's why I wanted to see you first."

"I haven't any idea what Dr. Baines's next commission is," Jack said, "and if I did I wouldn't tell you before he did."

"You have a remorselessly literal mind, Mr. Ginsberg. I'm not trying to pump you. I already know, and it's enough for the time being, that Mr. Baines's next commission will be something major; perhaps even a unique experiment in the history of the Art. Father Domenico's continued presence here suggests the same sort of thing. Very well, if I'm to tackle such a project, I'll need assistants — and I have no remaining apprentices; they become ambitious very early and either make stupid technical mistakes or have to be dismissed for disobedience. Laymen, even sympathetic laymen, are equally mischancy, simply because of their

eagerness and ignorance; but if they're highly intelligent, it's sometimes safe to use them. Sometimes. Given those disclaimers, that explains why I allowed you and Dr. Hess to watch the Christmas Eve affair, not just Dr. Hess whom Dr. Baines had asked for; and why I want to talk to you now."

"I see," Jack said. "I suppose I should be flattered."

Ware sat back in his chair and raised his hands as if exasperated. "Not at all. I see that I'd better be blunt. I was quite satisfied with Dr. Hess's potentialities and so don't need to talk to him any more, except to instruct him. But I am none too happy with yours. You strike me as a weak reed."

"I'm no magician," Jack said, holding onto his temper. "If there's some hostility between us, it's only fair to recognize that I'm not its sole cause. You went out of your way to insult me at our very first interview, only because I was normally suspicious of your pretensions, as I was supposed to be, on behalf of my job. I'm not easily offended, Dr. Ware, but I'm more cooperative if people are reasonably polite to me."

"*Stercor*," Ware said. The word meant nothing to Jack. "You keep thinking I'm talking about public relations, and getting along with people, and all that goose-grease. Far from it. A little hatred never hurts the Art, and studied insult is valuable in dealing with demons — there are only a few who can be flattered to any profit, and the man

who can be flattered isn't a man at all, he's a dog. Do try to understand me, Mr. Ginsberg. What I'm talking about is neither your footling hostility nor your unexpectedly slow brains, but your rabbit's courage. There was a moment during the last ceremony when I could see that you were going to step out of your post. You didn't know it, but I had to paralyze you, and I saved your life. If you had moved you would have endangered all of us, and had that happened I would have thrown you to MARCHOSIAS like an old bone. It wouldn't have saved the purpose of the ceremony, but it would have kept the demon from gobbling up everybody else but Ahktoi."

"Ach — ?"

"My familiar. The cat."

"Oh. Why not the cat?"

"He's on loan. He belongs to another demon — my patron. Do stop changing the subject, Mr. Ginsberg. If I'm going to trust you as a Tanist in a great work, I'm going to have to be reasonably sure that you'll stand fast when I tell you to stand fast, no matter what you see or hear, and that when I ask you to take some small part in the ritual, you'll do it accurately and punctually. Can you assure me of this?"

"Well," Jack said earnestly, "I'll do my best."

"But what for? Why do you want to sell me? I don't know what you mean by your 'best' until I know what's in it for you, besides just keeping you your job — or making a good impression on me because it's a reflex with you to make a good impression on people. Explain

this to me, please! I know that there's something in this situation that hits you where you live; I could see that from the outset, but my first guess as to what it was evidently was wrong, or anyhow not central. Well, what is central to you? The situation has now ripened to the point when you're going to have to tell me what it is. Otherwise I shall shut you out, and that will be that."

Wobbling between unconventional hope and standard caution, Jack pushed himself out of the Florentine chair and toe-heel-toed to the window, adjusting his tie automatically. From this height, the cliff-clinging apartments of Positano fell away to the narrow beach like so many Roman tenements crowded with deposed kings — and with beach-boys hoping to pick up an American heiress for the season. Except for the curling waves and a few distant birds, the scene was motionless, yet somehow to Jack it seemed to be slowly, inexorably sliding into the sea.

Sure, I like women," he said in a low voice. "And I've got special preferences I don't find it easy to satisfy, even with all the money I make. For one thing, in my job I'm constantly working with classified material — secrets — either some government's or the company's. That means I don't dare put myself into a position where I could be black-mailed."

"Which is why you refused my offer when we first talked," Ware said. "That was discreet, but unnecessary. As you've probably realized by now, neither spying nor extortion has any attraction for me

— the potential income from either or both would be a pittance to me.”

“Yes, but I won’t always have you around,” Jack said, turning back toward the desk. “And I’d be stupid to form new tastes that only you could keep supplied.”

“‘Pander to’ is the expression; let’s be precise. Nevertheless, you have some remedy in mind. Otherwise you wouldn’t be being even this frank.”

“Yes . . . I do. It occurred to me when you agreed to allow Hess to tour your laboratory.” He was halted by another stab of jealousy, no less acute for being half reminiscent. Drawing a deep breath, he went on: “I want to learn the Art.”

“Oho. That is a reversal.”

“**Y**ou said it was possible,” Jack said in a rush, emboldened by a desperate sense of having now nothing to lose, “I know you said you don’t take apprentices, but I wouldn’t be trying to stab you in the back or take over your clients, I’d only be using the Art for my specialized purposes. I couldn’t pay you any fortune, but I do have money. I could do the reading in my spare time and come back after a year or so for the actual instruction. I think Baines would give me a stabbatical for that. He wants somebody on his staff to know the Art, at least the theory, only he thinks it’s going to be Hess. But Hess will be too busy with his own sciences to do a thorough job of it.”

“You really hate Dr. Hess, don’t you?”

“We don’t impinge,” Jack said

stiffly. “Anyhow what I say is true; I could be a lot better expert from Baines’s point of view than Hess ever could.”

“Do you have a sense of humor, Mr. Ginsberg?”

“Certainly. Everybody does.”

“Untrue,” Ware said. “Everybody claims to have, that’s all. I ask only because the first thing to be sacrificed to the Art is the gift of laughter, and some people would miss it more than others. Yours seems to be residual at best; in you it would probably be a minor operation, like an appendectomy.”

“You don’t seem to have lost yours.”

“You confuse humor with wit, like most people. The two are as different as creativity and scholarship. However, as I say, in your case it’s not a great consideration, obviously. But there may be greater ones: for example, what tradition I would be training you in. For instance, I could make a Kabbalistic magician of you, which would give you a substantial grounding in white magic; and for the black, I could teach you most of what’s in the *Clavicle* and the *Legemeton*, cutting out the specifically Christian accretions. Would that content you, do you think?”

“Maybe, if it met my primary requirements,” Jack said. “But if I had to go on from there, I wouldn’t care. These days I’m a Jew only by birth, not by culture — and up until Christmas Eve I was an atheist. Now I don’t know what I am; all I know is I’ve got to believe what I see.”

“Not in this Art,” Ware said. “But

we'll think of you as a *tabula rasa* for the time being. Well, Mr. Ginsberg, I'll consider it. But before I decide, I think you ought to explore further your insight about special tastes becoming satisfiable only through magic, whether mine or yours. You like to think how delightful it would be to enjoy them freely and without fear of consequences, but it often happens — you'll remember Oscar Wilde's epigram on the subject — that fulfilled desire isn't a delight, but a cross."

"I'll take the chance."

"Don't be so hasty. You have no real idea of the risks. Suppose you should find, for example, that no human woman could please you any more, and you'd become dependent on succubi? I don't know how much you know of the theory of such a relationship. In general, the revolt in Heaven involved angels from every order in the hierarchy; and of the Fallen, only those who fell from the lowest ranks are assigned to this sort of duty. By comparison, MARCHOSIAS is a paragon of nobility. These creatures have even lost their names, and there's nothing in the least grand about their malignancy — they are pure essences of narrow meanness and petty spite, the kind of spirit a Sicilian milkmaid calls on to make her rival's toenails split or give an unfaithful lover a pimple on the end of his nose."

"That doesn't make them sound different from ordinary women," Jack said, shrugging. "So long as they deliver, what does it matter? Presumably, as a magician I'd have some control over their behavior."

"Yes, Nevertheless, why be persuaded out of desire and ignorance, when an experiment is available to you? In fact, Mr. Ginsberg, I would not trust any resolution you made from the state of simple fantasy you're in now. If you won't try the experiment, I must refuse your petition."

"Now wait a minute," Jack said. "Why are you so urgent about this, anyhow? What kind of advantage do you get out of it?"

"I've already told you that," Ware said patiently. "I will probably need you as a Tanist in Dr. Baines's major enterprise. I want to be able to trust you to stand fast, and I won't be able to do that without being sure of your degree and kind of commitment."

Everything that Ware said seemed to have behind it the sound of doors softly closing in Jack's face. And on the other hand, the possibilities — the opportunities —

"What," he said. "Must I do?"

## XI

The palazzo was asleep. In the distance, that same oblivious clock struck eleven; the proper hour of this day, Ware had said, for experiments in venery. Jack waited nervously for it to stop, or for something to begin.

His preparations were all made, but he was uncertain whether any of them had been necessary. After all, if the . . . girl . . . who was to come to him was to be totally amenable to his wishes, why should he have to impress her?

Nevertheless, he had gone through all the special rituals, bathing for an hour, shaving twice, trimming his finger and toenails and buffing them, brushing his hair back for thirty strokes and combing it with the West German tonic which was said to have allatoin in it, dressing in his best silk pajamas, smoking jacket (though he neither smoked nor drank), ascot and Venetian leather slippers, adding a dash of cologne, and scattering a light film of talcum powder inside the bed. Maybe, he thought, part of the pleasure would be in taking all the trouble and having everything work.

The clock stopped striking. Almost at once, there was a slow triple knock at the door, so slow that each soft blow seemed like an independent act. Jack's heart bounded like a boy's. Pulling the sash of his jacket tighter, he said as instructed:

"Come in . . . Come in . . . Come in."

He opened the door. As Ware had told him to expect, there was no one in the dark corridor outside; but when he closed in the door and turned around, there she was.

"Good evening," she said in a light voice with the barest trace of an accent — or was it a lisp? "I am here, as you invited me. Do you like me?"

It was not the same girl who had brought the letter to Ware, so many weeks ago, though she somehow reminded him of someone he had once known, he could not think who. This one was positively beautiful. She was small — half a head shorter than Jack, slender and apparently only

about eighteen — and very fair, with blue eyes and a fresh, innocent expression which was doubly piquant because the lines of her features were patrician, her skin so delicate that it was almost like fine parchment.

She was fully clothed, in spike heels, patterned but otherwise sheer stockings, and a short-sleeved, expensively tailored black dress of some material like rayon which clung to her breasts, waist and upper hips as though electrified, and then burst into a full skirt like an inverted tulip which broke just above her knees. Wire-thin silver bracelets slid and tinkled almost inaudibly on her left wrist as she ruffled her chrysanthemum-petal coiffure, and small silver earrings echoed them; between her breasts was a circular onyx brooch inlaid in silver with the word *Cazotte*, set off by a ruby about the size of a fly's eye, the only touch of color in the entire costume; even her make-up was the Italian "white look," long out of style but so exaggerating her paleness as to look almost theatrical on her — almost, but not quite.

"Yes," he said, remembering to breathe.

"Ah, you make up your mind so soon. Perhaps you are wrong." She pirouetted away from him toward the bed, making the black tulip flare and lace foam under its corolla around her legs with a dry rustling. She stopped the spin facing him, so suddenly that the skirts snapped above her knees like banners in a stiff gust. She seemed wholly human.

"Impossible," Jack said, mustering all his gallantry. "I think you're exquisite. Uh, what shall I call you?"

"Oh, I do not come when called. You will have to exert yourself more than that. But my name could be Rita, if you need one."

She lifted the front of the skirts up over the welts of her stockings, which cut her white thighs only a few inches beneath the vase of her pelvis, and sat down daintily on the side of the bed. "You are very distant," she said, pouting. "Perhaps you suspect I am only pretty on the outside. That would be unfair."

"Oh no, I'm sure —"

"But how can you be sure yet?" She drew up her heels. "You must come and see."

The clock was striking four when she arose, somehow looking as though she were still on high heels, and began to dip up her clothes from the floor. Jack watched this little ballet in a dizziness half exhaustion and half triumph. He had hardly enough strength left to wiggle a toe, but he had already surprised himself so often that he still had hopes. Nothing had ever been like this before, nothing.

"Must you go?" he said sluggishly.

"Oh, yes, I have other business yet."

"Other business? But — didn't you have a good time?"

"A — good time?" The girl turned toward him, stopping in the act of fastening a garter strap. "I am thy servant and thy lamia, Eve-fruit, but thou must not mock me."

"I don't understand," Jack said,

struggling to lift his head from the bunched, sweaty pillow.

"Then keep silent." She resumed assembling herself.

"But — you seemed —"

She turned to him again. "I gave thee pleasure. Congratulate thyself; that is enough. Thou knowest well what I am. I take no pleasure in anything; it is not permitted. Be grateful, and I shall come to thee again; but mock me, and I shall send thee instead a hag with an ass's tail."

"I meant no offense," he said, half sullenly.

"See thou dost not. Thou hadst pleasure with me, that sufficeth; thou must prove thy virility with mortal flesh. Thy potency, that I go to try even now; it comes on to night i' the other side of the world, and I must plant thy seed before it dies in my fires — if ever it lived at all."

"What do you mean?" he said, in a hoarse whisper.

"Have no fear, I shall be back tomorrow. But in the next span of the dark I must change suit." The dress fell down over the impossibly pliant body. "I become an incubus now, and a woman waits for that, diverted from her husband by the two-fold way. Reach I her in time, thou shalt father a child on a woman thou shalt never even see. Is that not a wonder? And a fearful child it shall be, I promise thee!"

She smiled at him. Behind her lids now, he saw with nausea and shame, there were no longer any eyes — only blankly flickering lights, like rising sparks in a flue. She was now as fully dressed as she had been at the beginning, courtseying gravely.

"Wait for me . . . unless, of course, thou dost not want me back tomorrow night . . .?"

He tried not to answer, but the words came out like clots of poisonous gas.

"Yes . . . Oh, God . . ."

Cupping both hands over her hidden groin in a gesture of obscene conservatism, she popped into nothingness like a bursting balloon, and the whole weight of the dawn fell upon Jack like the mountains of St. John the Divine.

## XII

**D**r. Stockhausen died on St. Valentine's day, after three days' fruitless attempts by surgeons from all over the world, even the USSR, to save him from the effects of a draught of a hundred minims of tincture of iodine. The surgery and hospital care were all free; but he died intestate, and it appeared that his small estate — a few royalties from his books and the remains of a ten-year-old Nobel Prize — would be tied up indefinitely. Especially in view of the note he left behind, out of which no tribunal, whether scientific or judicial, could hope to separate the mathematics from the ravings for generations to come.

Funds were gathered for his grandchildren and divorced daughter to tide them over; but the last book that he had been writing turned out to be so much like the note that his publishers' referees could think of no colleague to whom it could reasonably be offered for posthumous col-

laboration. It was said that his brain would be donated to the museum of the Deutsches Akademie in Munich — again only if his affairs could ever be probated. Within three days after the funeral, however, Ware was able to report, both brain and manuscript had vanished.

"MARCHOSIAS may have taken one or both of them," Ware said. "I didn't tell him to, since I didn't want to cause any more suffering to Albert's relatives than was inevitable under the terms of the commission. On the other hand, I didn't tell him not to, either. But the commission itself has been executed."

"Very good," Baines said. He was, in fact, elated. Of the other three people in the office with Ware — for Ware had said there was no way to prevent Fr. Domenico from attending — none looked as pleased as Baines felt, but after all he was the only man who counted here, the only one to whose emotions Ware need pay any more than marginal attention. "And much faster than you had anticipated, too. I'm very well satisfied. And also I'm now quite ready to discuss my major commission with you, Dr. Ware, if the planets and so on don't make this a poor time to talk about it."

"The planetary influences exert almost no effect upon simple discussion," Ware said, "only on specific preparations — and of course on the experiment itself. And I'm quite rested and ready to listen. In fact, I'm in an acute state of curiosity. Please charge right in and tell me about it."

"I would like to let all the major

demons out of Hell for one night, turn them loose in the world with no orders and no restrictions — except of course that they go back by dawn or some other sensible time — and see just what it is they would do if they were left on their own hooks like that.”

“Insanity!” Fr. Domenico cried out, crossing himself. “Now surely the man is possessed already!”

“For once, I’m inclined to agree with you, Father,” Ware said, “though with some reservations about the possession question. For all we can know now, it’s entirely in character. Tell me this, Dr. Baines: what do you hope to accomplish through an experiment on so colossal a scale?”

“Experiment!” Fr. Domenico said, his face as white as the dead.

“If you can do no more than echo, Father, I think we’d all prefer that you kept silent — at least until we find out what it is we’re talking about.”

“I will say what I need to say, when I think it is needful,” Fr. Domenico said angrily. “This thing that you’re minimizing by calling it an ‘experiment’ might well end in the dawn of Armageddon!”

“Then you should welcome it, not fear it, since you’re convinced your side must win,” Ware said. “But actually there’s no such risk. The results may well be rather apocalyptic, but Armageddon requires the prior appearance of the AntiChrist, and I assure you I am not he . . . nor do I see anybody else in the world who might qualify. Now,

again, Dr. Baines, what do you hope to accomplish through this?”

“Nothing through it,” Baines, now totally caught up in the vision, said dreamily. “Only the thing itself — for its esthetic interest alone. A work of art, if you like. A gigantic action painting, with the world for a canvas —”

“— and human blood for pigments,” Fr. Domenico ground out.

Ware held up his hand, palm toward the monk. “I had thought,” he said to Baines, “that this was the art you practiced already, and in effect sold the resulting canvasses, too.”

“The sales kept me able to continue practicing it,” Baines said, but he was beginning to find the metaphor awkward, his though it had originally been. “Look at it this way for a moment, Dr. Ware. Very roughly, there are only two general kinds of men who go into the munitions business: those without consciences, who see the business as an avenue to a great fortune, eventually to be used for something else, like Jack here — and of course there’s a sub-class of those, people who *do* have consciences but can’t resist the money anyhow, or the knowledge, rather like Dr. Hess.”

Both men stirred, but apparently both decided not to dispute their portraits.

“The second kind is made up of people like me: people who actually take pleasure in the controlled production of chaos and destruction. Not sadists primarily, except in the sense that every dedicated artist is something of a sadist, willing to



countenance a little or a lot of suffering — not only his own, but other people's — for the sake of the end-product."

"A familiar type, to be sure," Ware said with a lop-sided grin. "I think it was the saintly Robert Frost, who said that a painting by Whistler was worth any number of old ladies."

"Engineers are like this too," Baines said, warming rapidly to his demonstration; he had been thinking about almost nothing else since the conjuration he had attended. "There's a breed I know much better than I do artists, and I can tell you that most of them wouldn't build a thing if it weren't for the kick they get out of the preliminary demolitions involved. A common thief with a gun in his hand isn't half as dangerous as an engineer with a stick of dynamite."

"But in my case, just as in the case of the engineer, the key word is 'controlled' — and in the munitions business, it's rapidly becoming an obsolete word, thanks to nuclear weapons."

He went on quickly to sketch his dissatisfactions, very much as they had first come to a head in Rome while Gov. Rogan had been being sent for. "So now you can see what appeals to me about the commission I propose. It won't be a series of mass obliterations under nobody's control, but a whole set of individuals actions, each in itself on a comparatively small scale — and each one, I'm sure, interesting in itself because of all the different varieties of ingenuity and surprise to be in-

involved. And it won't be total because it will also be self-limiting to some small period of time, presumably twelve hours or less."

Fr. Domenico leaned forward earnestly. "Surely," he said to Ware, "even you can see that no human being, no matter how sinful and self-indulgent, could have elaborated anything so monstrous without the direct intervention of Hell!"

"On the contrary," Ware said, "Dr. Baines is quite right, most dedicated secularists think exactly as he does — only on a somewhat smaller scale. For your further comfort, Father, I am somewhat privy to the affairs of Hell, and I investigate all my major clients thoroughly. I can tell you that Dr. Baines is *not* possessed. But all the same there are still a few mysteries here. Dr. Baines, I still think you may be resorting to too big a brush for the intended canvas and might get the effects you want entirely without my help. For example, why won't the forthcoming Sino-Russian War be enough for you?"

"So that's really going to happen?"

"It's written down to happen; it still might not, but I wouldn't bet against it. Very likely it won't be a major nuclear war; three fusion bombs, one Chinese, two Soviet, plus about twenty fission explosions, and then about a year of conventional land war. No other powers are at all likely to become involved. You know this, Dr. Baines, and I should think it would please you; after all, it's almost exactly the way your firm has been trying to pre-set it."

"You're full of consolations today," Fr. Domenico muttered.

"Well, in fact, I *am* damn pleased to hear it," Baines said. "It isn't often that you plan something that big and have it come off almost as planned. But no, Dr. Ware, it won't be enough for me, because it's still too general and difficult to follow — or will be; I'm having a little trouble with my tenses. For one thing, it won't be sufficiently attributable to me. Many people have been working to bring that war about. This experiment will be on my initiative alone."

"Not an insuperable objection," Ware said. "A good many Renaissance artists didn't object to collaborators — even journeymen."

"Well, the spirit of the times has changed, if you want an abstract answer. The real answer is that I *do* object. Furthermore, Dr. Ware, I want to choose my own medium. War doesn't satisfy me any more. It's too sloppy, too subject to accident. It excuses too much."

"?" Ware said with an eyebrow.

"I mean that in time of war, especially in Asia, people expect the worst and try to ride with the punches, no matter how terrible they are. In peacetime, on the other hand, even a small misfortune comes as a total surprise. People complain, 'Why did this have to happen to *me*?' — as though they'd never heard of Job."

"Re-writing Job is the humanist's favorite pastime," Ware agreed. "And his favorite political platform, too. So in fact, Dr. Baines, you *do* want to afflict people, just where

they're most sensitive to being afflicted, and just when they least expect it, right or wrong. Do I understand you correctly?"

Baines had the sinking feeling that he had explained too much, but there was no help for that now; and in any event, Ware was hardly himself a saint.

"You do," he said shortly.

"Thank you. That clears the air enormously. One more question: How do you propose to pay for all this?"

Fr. Domenico surged to his feet with a strangled gasp of horror, like the death-throes of an asthmatic.

"You — you mean to do this!"

"Hush. I haven't said so. Dr. Baines, the question?"

"I know I couldn't pay for it in cash," Baines said. "But I've got other assets. This experiment — if it works — is going to satisfy something for me that Consolidated Warfare Service hasn't satisfied in years and probably never will again except marginally. I'm willing to make over most of my CWS stock to you. Not all of it, but — well — just short of being a controlling interest. You ought to be able to do a lot with that."

"It's hardly enough, considering the risks involved," Ware said slowly. "On the other hand, I've no particular desire to bankrupt you —"

"Doctor Ware," Fr. Domenico said in an iron voice. "Am I to conclude that you *are* going to undertake this fearful insanity?"

"I haven't said so," Ware replied mildly. "If I do, I shall certainly need your help —"

"Never. Never!"

"— and everybody else's. It isn't really the money that attracts me, primarily. But without the money I should never be able to undertake an experiment like this in the first place, and I'm certain the opportunity will never come up again. If the whole thing doesn't blow up in my face, there'd be an enormous amount to learn from a trial like this."

"I think that's right," Hess' voice said. Baines looked toward him in surprise, but Hess seemed quite serious. "I'd be greatly interested in it myself."

"You'll learn nothing," Fr. Domenico said, "but the shortest of all short-cuts to Hell, probably in the body!"

"A negative Assumption?" Ware said, raising both eyebrows this time. "But now you're tempting my pride, Father. There've been only two previous ones in Western history: Johannes Faustus and Don Juan Tenorio. And neither one was properly safeguarded or otherwise prepared. Well, now certainly I must undertake so great a work — provided that Dr. Baines is satisfied that he'll get what he'll be paying for."

"Of course I'm satisfied," Baines said, quivering with joy.

"Not so fast. You've asked me to let all the major demons out of Hell. I can't even begin to do that; I can call up only those with whom I have pacts and their subordinates. No matter what you have read in Romantic novels and plays, the three superior spirits cannot be invoked at all and never sign pacts: those be-

ing SATHANAS, BEELZEBUTH and SATANACHIA. Under each of these are two ministers, with one of the six of which it is possible to make pacts — one per magician, that is. I control LUCIFUGE ROFOCALE, and he me. Under him in turn, I have pacts with some eighty-nine other spirits, not all of which would be of any use to us here — VASSAGO, for instance, who has a mild nature and no powers except in crystallomancy, of PHOENIX, a poet and teacher. With the utmost in careful preparations, we might involve as many as fifty of the rest, certainly no more. Frankly, I think that will prove to be more than enough."

"I'll cheerfully take your word for it," Baines said promptly. "You're the expert. Will you take it on?"

"Yes."

Fr. Domenico, who was still standing, swung away toward the door, but Ware's hand shot out toward him above the desk as if to grasp the monk by the nape of the neck. "Hold!" the magician said. "Your commission is *not* discharged, Father Domenico, as you know very well in your heart. You must observe this sending. Even more important, you have already said yourself that it is going to be difficult to keep under control. To that end I demand your unstinting advice in the preparation; your presence in the conjurations, and, should they be needed, your utmost offices in helping me and my other Tanists to abort it. This you cannot refuse — it is all in your mission by stipulation, and in the Covenant by implication. I do not force you to it. I do but remind

you of your positive duty to your Lord."

"That . . . is . . . true . . ." Fr. Domenico said in a sick whisper. His face as gray as an untinted new blotter, he groped for the chair and sat down again.

"Nobly faced. I'll have to instruct everyone here, but I'll start with you, in deference to your distress —"

"One question," Fr. Domenico said. "Once you've instructed us all, you'll be out of touch with us for perhaps as much as a month to come. I demand the time to visit my colleagues, and perhaps call together a convocation of all white magicians —"

"To prevent me?" Ware said between his teeth. "You can demand no such thing. The Covenant forbids the slightest interference."

"I'm all too horribly aware of that. No, not to interfere, but to stand by, in case of disaster. It would be too late to call for them once you *knew* you were losing control."

"Hmm . . . . Probably a wise precaution, and one I couldn't justly prevent. Very well; just be sure you're back when the time comes. About the day, what would you suggest? May Eve is an obvious choice, and we may well need that much time in preparation.

"It's *too* good a time for any sort of control," Fr. Domenico said grimly. "I definitely do not recommend piling a real Walpurgisnight on top of the formal one. It would be wiser to choose an *unfavorable* night, the more unfavorable the better."

"Excellent good sense," Ware said. "Very well, then. Inform your friends. The experiment is hereby scheduled for Easter."

With a scream, Fr. Domenico bolted from the room. Had Baines not been taught all his life long that such a thing was impossible in a man of God, Baines would have identified it without a second thought as a scream of hatred.

### XIII

Theron Ware had been dreaming a journey to the Antarctic continent in the midst of its Jurassic splendor, fifty million years ago, but the dream had been becoming a little muddled with personal fantasies — mostly involving a minor enemy he had in reality had sent for, with flourishes, a good decade ago — and he was not sorry when it vanished unfinished at dawn.

He awoke sweating, though the dream had not been especially stressful. The reason was not far to seek. Ahktoi was sleeping, a puddle of lard and fur, on the pillow and had nearly crowded Ware's head off it. Ware sat up, mopping his pate with the top sheet, and stared at the cat with nearly neutral annoyance. Even for an Abyssinian, a big-bound breed, the familiar was grossly over-weight; clearly an exclusive diet of human flesh was not a healthy regimen for a cat. Furthermore, Ware was not even sure it was necessary. It was prescribed only in Eliphaz Levi, who often made up such details as he went along. Certainly PHOENIX, whose creature Ahktoi was, had

made no such stipulation. On the other hand, it was always best to play safe in such matters; and besides, financially the diet was not much more than a nuisance. The worst that could be said for it was that it spoiled the cat's lines.

Ware arose, naked, and crossed the cold room to the lectern which bore up his Great Book — not the book of pacts, which was of course still safely in the workroom, but his book of new knowledge. It was open to the section headed

## QUASARS

but except for the brief paragraph summarizing the reliable scientific information on the subject — a very brief paragraph indeed — the pages were still blank.

Well, that, like so much else, could wait until Baines's project was executed. Truly colossal advances might be made in the Great Book, once all that CWS money was in the bank.

Ware's retirement had left the members of Baines's party again at loose ends, and all of them, even Baines, were probably a little shaken at the magnitude of what they had contracted for. In Baines and Dr. Hess, perhaps, there still remained some faint traces of doubt about its possibility, or at least some inability to imagine what it would be like, despite the previous apparition of MARCHOSIAS. No such impediment could protect Jack Ginsberg, however — not now, when he awakened each morning with the very taste of Hell in his mouth. Ginsberg was committed, but he was not wearing

well; he would have to be watched. The waiting period would be especially hard on him. Well, that couldn't be helped; it was prescribed.

The cat uncurled, yawned, stretched, lurched daintily to its feet and paused at the edge of the bed, peering down the sideboard as though contemplating the inward slope of Fujiyama. At last it hit the floor with a double *splat!* like the impacts of two loaded sponges. There it arched its spine again, stretched out its back legs individually in an ecstasy of quivering and walked slowly toward Ware, its furry abdomen swinging from side to side. *Hein?* it said in a breathy feminine voice.

"In a minute," Ware said, preoccupied. "You'll get fed when I do." He had forgotten for the moment that he had just begun a nine days' fast, which when completed he would enforce also upon Baines and his henchmen. "Father Eternal, O thou who are seated upon cherubim and seraphim, who beholdest the earth and the sea, unto thee do I lift up my hands, and beseech thine aid alone, thou who art the fulfillment of works, who givest booty unto those who toil, who exaltest the proud, who art destroyer of all life and author of death; rest art thou, protector of those who call upon thee; do thou guard and defend me in this undertaking, thou who livest and reignest forever and ever. Amen! Shut up, Ahktoi."

Anyhow it had been years since he had believed for an instant that Ahktoi was really hungry. Maybe lean meat was what the cat needed,

instead of all that baby-fat — though stillbirths were certainly the easiest kind of rations to get for him.

Ring for Gretchen, Ware went into the bathroom, where he ran a bath, into which he dashed an ounce of exorcised water left over from the dressing of a parchment. Ahktoi, who like most Abyssinians loved running water, leapt up on the rim of the tub and tried to fish for bubbles. Pushing the cat off, Ware sat down in the warm pool and spoke the Thirteenth Psalm, *Dominus illuminatio mea*, of death and resurrection, his voice resounding hollowly from the tiles; adding, "Lord who hast formed man out of nothing to thine own image and likeness, and me also, unworthy sinner as I am, deign, I pray thee, to bless and sanctify this water, that all delusion may depart from me unto thee, almighty and ineffable, who didst lead forth thy people from the land of Egypt, and didst cause them to pass dryshod under the Red Sea, anoint me an thou wilt, father of sins. Amen."

He slid under the water, crown to toes — but not for long, for the ounce of exorcised water he had added still had a trace of quicklime in it from the tanning of the lamb-skin, which made his eyes sting. He surfaced, blowing like a whale, and added quickly to the steamy air, "*Dixit insipiens in corde suo . . . .* Will you kindly get out of the way, Ahktoi . . . . who hast formed me in thine image and in they likeness, deign to bless and sanctify this water, so that it may become unto



me the fruition of my soul and body and purpose. Amen."

*Hein?*

Someone knocked on the door. His eyes squeezed closed still, Ware groped his way out. He was met at the threshold by Gretchen, who sponged his hands and face ritually with an asperged white cloth and retreated before him as he advanced into the bedroom. Now that his eyes were cleared, he could see that she was naked, but knowing what she was that could scarcely interest him, and besides, he had been devoted to celibacy since his earliest love of magic, like anyone in Orders. Her nakedness was only another rule of the rite of lustration. Waving her aside, he took three steps toward the bed, where she had laid out his vestments, and said to all

corners of the phenomenal and epiphenomenal world:

"ASTROSCHIO, ASATH, a sacre BEDRIMUBAL, FELUT, ANABOTOS, SERABILIM, SERGEN, GEMEN, DOMOS, who art seated above the heavens, who beholdest the depths, grant me, I pray thee, that those things which I conceive in my mind may also be executed by me through thee, who appear clean before thee! Amen."

Gretchen went out, flexing her sycorous buttocks, and Ware began the rite of vesting. *Hein?* Ahktoi said plaintively, but Ware did not hear. His triduum was launched, devoutly, in water and would be observed, strictly, until the end in blood; wherein would be required to the slaughter a lamb, a dog, a hen and a cat.

## TO BE CONCLUDED

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IF

# INVADER

by HARL VINCENT

Illustrated by BODÉ

*Someone was sharing my  
body — and doing better  
with it than I ever did!*

I

Ever wake up in the middle of the night with the eerie conviction that someone was there in the darkness of your room? I guess almost everybody has.

But this night it was different with me. Not *someone*, but *something* was there; and it was in my bed — real, a thing that glided up from the sheet and skimmed across my chest — not touching the skin though, seemingly — up, up toward my face.

I grabbed for it, but found nothing. Then, as I rolled over to snap on the light, it settled on the back of my neck; and there I did get the feel of the thing for an instant. Or did I? It seemed like a half clam shell with the flat open side against me, and as I tried to explore it with my fingers it literally melted or dissolved. Better to say that it absorbed swiftly into my body at that point without my feeling anything whatever of its entrance.

There was somehow the impres-



sion that, if this had been a clam shell, a small one like a Cherry-stone, the creature itself was in the half and was alive. Though there was no feeling of wetness, in fact no sensation at all. Only an impression. The light flicked on at my finger's touch, and I sat up jerkily, blinking to assure myself that I wasn't dreaming. A voice within told me soothingly and convincingly to go back to sleep. Which I must have done at once.

Twelve light-years distant in the city of Xenor on Tau Ceti II, planet of the rose-tinted mists, a huge crowd was assembled in the palace square. The hush of fearful anticipation held them as their faces all raised up toward a balcony of the palace. No humanoids, these; they were magnificently built humans, differing from us mainly in the golden hue of their irises and their simple, glistening, skintight garb.

Among those near the walls were twenty or more of the Small Folk, likewise human in appearance on a miniature scale, but with heads slightly oversized for their 24-inch, nearly naked, chubby bodies. They had no wings, but levitated and flitted about almost continuously. Their mission seemed to be to allay the obvious fears of the multitude since, even though they spoke or sang no words, their cheering thoughts were spread throughout the square without discrimination. The burden of these was: "Our princess will recover. We know. We *know*. Believe us!"

Beyond the wall could be seen the multicolored, pyramidal buildings of a great city: windowless structures with aircars darting busily hither and yon amongst them, often landing on a stage atop one of the tall edifices. Far beyond the city, of course, towered mighty Mount Leo with its upper halo of rose-hued mist on which the late sun gleamed redly and hotly.

Inside the palace, in a large room from which the balcony opened, an agitated young man in princely garb faced the Mindmaster, who was robed like a monk. On a couch before them lay the draped form of a girl of charming proportions, her face nearly hidden in a tumbled mass of glorious golden hair. She was obviously in deep coma.

"What's the verdict, Nelot?" the young man demanded.

"Prince Bor, our tests show that in the hysteria of her original seizure the cortex fled her brain and has since taken up residence in a maid of Erd."

"Eard, third planet of the white sun Saltan? So far?"

"Just so," the Mindmaster said gravely.

"What's being done? Arla *must* be saved; think of our subjects out there. Think even of me!" The young man sounded panicky.

"We'll do everything possible — with your cooperation. I've means for teleporting your cortex to Erd, there to reside in a selected male whom we can assist and direct, hopefully unknown to him, to provide protection for her — mainly against herself."



"Meaning her suicidal impulses may return?"

"Afraid so, which is foremost to be guarded against. It now remains only to find a suitable male; he must be about your age, mentally and physically fit and of good moral caliber. You'll be provided with the mental and occult powers necessary to the task."

"How long will it take to find this man?"

"Not long, I hope. Be patient while I continue the search."

Rosy mists swirled, and the two standing figures as well as the inert one were blotted from view for a moment. Flashes of movement showed through, and then the mists cleared away to reveal a second draped form on a pallet beside the

girl's. It was Bor, head uncovered and eyes shining. The crowd outside, save for the flutterings of the Small Folk with their unspoken assurances, remained silent — waiting.

"You're certain he's the right one. Nelot?" quavered the prince.

"He tested out in all respects."

"Then why delay?"

"We won't, my dear Bor, not any further. Quiet now. Still."

Once more the mists swirled, now hiding only the recumbent ones and Nelot's lower portion. The Mind-master reached up, and a beam of light like that of a theatrical spot streaked down to illumine the rosy mist over the spot where Bor's head lay.

A aplike shape pushed up, quivering, and then rapidly dwindling in size to approximately that of a

golf ball. The Mindmaster, his brow corrugated, gestured; and the ball sped off into infinite distance, shrinking as it raced until it was a minute but brilliant speck of light, then vanishing like the light spot from a TV tube.

As the mist cleared to reveal the two recumbent figures again, it was evident that they were in similar comas. Bor's fine features had congealed into a solid mask, and there was no indication whatever that he even breathed.

Nelot composed the draping of both figures, then stepped to the balcony and reassured the crowd in the plaza as best he could. His talk was continuing as all faded from sight and sound.

## II

In the office next morning, my partner Grant Cory looked at me searchingly as he came in. Our secretary hadn't arrived yet, and I was opening the morning mail. It was early.

"What's been happening to you?" Grant asked. "You look like a new guy."

"Hah! I sure don't feel like it," I told him. "I had a perfectly rotten night."

"Couldn't sleep?"

"Worse. Crazy dreams."

A slip of paper slid from the envelope I'd just slit, a check.

"Hey! Look at this!" I waved it before my partner. "It was for \$17,000.00. 'And listen to this . . .'"

I read from the accompanying letter, which was from a client we'd

worked extremely hard to please.

"It ends up," I said and quoted: 'An extra two thousand over and above your fee is included as a bonus for the excellent report your partnership rendered. You will hear from us the first of next month with regard to another report we want you to make.'"

"How about that?" Grant was on his feet doing a sort of little tap dance. "This seems to be our lucky day."

Miss Bailey came in then and took over the rest of the mail, her eyes widening behind the thick glasses when she saw the check. Later a second check for CORY AND RADFORD turned up, and this was in the thousands too, though less than half the previous one. At any rate, we were flushed with success — it isn't every day that a youthful partnership of consulting engineers sees so much in the way of fees.

"Time for vacation," Grant declared. "What say, Chuck? I've been wanting to take the family to Acapulco for a long time — wife has a cousin there. So what say we split the bonus and go places?"

"Okay," said I, "and I think I'll go to Vegas, not having a family. You may take two weeks with pay when we return, Miss Bailey."

The girl grinned her thanks.

"Vegas!" exclaimed Cory. "You don't gamble."

I'd been asking myself already what prompted me to decide on Las Vegas, for the reason he mentioned. Though to drive the route was an appealing prospect.

"Oh, it can be exciting or restful

there, as you choose. I like to see a girlie show now and then; and, besides, Jack Carter's at the Flamingo, and I get a big bang out of him."

A small accusing voice within told me these weren't the real reasons, but I couldn't think of any other at the moment.

"Everyone to his own taste," Grant said. "So let's go."

"I'll give you a ring every second day, Miss Bailey," I told her, "to see what's going on. Watch things, huh?"

We were gone then, leaving our desks perfectly clear.

I hadn't even known there was a Star Vega Hotel in Vegas, but I flew up there from LA on one of their planes instead of driving. A thing I never would have done ordinarily. So I guessed Cory had been right; I did seem to be a new guy.

And the Star Vega was quite a splash, a 35-story, aluminum-and-glass deal that dwarfed all the others on the strip. With a regular park all around it and a lagoon with swans. Posh! Luxury itself.

The lobby was like most of the others only more so, opening into the casino on the right side and with elevators and the registration desk on the left. I filled out the card, and a snooty bellhop took my grips and led me to room 2929, where he held out his hand for the fiver I was sap enough to slip him. Didn't even thank me, so I guess I wasn't so bighearted at that. After all, he *had* opened the transom.

I looked out the window down the strip, where the neons were al-

ready starting to flare. Quite a sight! I was suddenly and unaccountably seized with a desire to try my luck in the casino. Imagine!

Next thing I was in line at one of the cashier's booths and buying five bucks worth of quarters. Then I strolled along a row of two-bit, one-arm bandits and played one of the quarters in each, hitting the jackpot in one after another of them. Both my jacket pockets were filled, and quarters were splashing all over the floor, jangling and rolling every which way. I had quite a following all of a sudden and this included a page boy (they hate being called bellhops in this place) with a canvas sack two feet deep and some sage advice that he whispered while collecting the next jackpot in his bag.

"If I was you, mister," he muttered, "I'd lay off the slot machines a while. Else they'll think you're just too damn lucky."

"Who're 'they?'" I whispered back as he gathered in another jackpot.

"Just 'they.'"

I played the last four machines in the row — jackpots all — and his sack was loaded to the point where he could barely carry it.

"I'll change these into tens and twenties for you," he panted.

"Okay and keep twenty for yourself," knowing he'd steal more than that and caring not at all.

I moved over to one of the crap games as he staggered off.

Here I made side bets and won them all, whether I bet for or against the player. My pockets were

filling with bills now. Some IOU's too, which I tucked into a separate pocket.

Then the dice were in my hand, and I was rattling them for a roll. Never shot crap in my life, but I'd been watching and listening. Made what are called "passes" — twelve in a row. Not without a fuss though; at every third pass as I let all or most of the money ride I got a dirty look and a fresh pair of dice. But I kept right on winning, mostly with naturals; but if I did roll a point — and there were only two of these, a ten and a four — I made it on the next toss. Bettors on the side were making a cleanup on me too when a small voice inside told me to draw way down, bet only ten bucks, that I was about to crap out. Which I did on the next roll. "Snake-eyes!" someone groaned.

Counting my winnings, I had over sixteen thousand dollars before I took the sheaf of bills the pageboy brought me. "Twenty-seven C's here," he whispered and was gone.

I sauntered over to one of the blackjack tables and watched that game for a while; then when a player across from the dealer roost to leave the game, I started to edge into his seat.

"Huh-uh," husked the dealer, "you're too hot. Try the Sands."

So the word had been passed: here's a possible big winner.

Lucky as I'd been — or whatever you want to call it — I'd developed no gambling fever whatsoever. There was only that small voice that egged me on, telling me I hadn't

won enough yet. Enough for what?

At the Sands I started differently, picking out the few slot machines that took in silver dollars when there were plenty of those to be had and paid off in kind, but now used those cashable dollar-sized tokens with the casino's name showing prominently among the imprints.

I still hit the jackpots, but changed my procedure by feeding back a couple of tokens from the loot, then cashing in immediately after each successive haul. This proved to be a smart move on account of the lesser attention it attracted, besides being easier on my pockets. I'd added quite a bundle of tens, twenties and even C-notes to my take by the time I found and cleaned up on the last dollar machine.

Then to the wheel, and here I played a cautious game, although I won every bet I placed. But they weren't spectacularly large bets; I spaced them and after each win I walked around for a while and came back later — four or five times, I guess. By the time the croupier was wising up to me I was ready to quit anyway and had what I thought to be a lot of loot from this source. Though I learned later that I was little more than a piker compared with some of the legendary big winners. Which was good, I suppose.

My next play was at the Riviera. I'd aimed at the Sahara, but the cabbie touted me off that and onto the Riviera — said it was going bad for the house there that night. As if I hadn't done well enough already, by my standards. Of course I didn't know just how much I'd

deposited with the managers when I made that brief stop back at the Star Vega after the Sands play but guessed it might be twenty grand or more.

Never used the word "grand" in that sense before either — so it must be some of the jargon of the strip was rubbing off on me.

In the Riviera casino I made directly for the first crap game in sight and there I made a few side bets, winning them all. I was tired of it by now and very glad to hear that small voice say, "It's enough." So that was that; I quit and was paid off to the tune of only eighteen C's. But if that was enough, so be it. I was really weary.

### III

Back at the Star Vega, I sat down at one of those little tables that dot the edges of the casino here and there, a table not too far from the desk and the elevators. A perky cocktail waitress, wearing much much less than the law allows, asked for my order.

"A double Scotch," I said, "on the rocks, with iced coffee on the side.

The girl looked at me like I must be crazy or something. Maybe I was just then, but this was what I wanted and I didn't bat an eye — if you can bat an eye either with or without a bat.

"Yes sure," she gurgled and flitted off with a display of about all the skin she had.

The drink was a good one and only set me back five bucks plus a

dollar tip. So what! The gal was cute, and I was in the swankiest place on the strip, besides having played — and beat — the casinos for most of an evening. I should feel good about it, I suppose, but somehow I didn't. In fact, I felt a little depressed by it all.

At this point I suddenly seemed to be two people. Things became confused, and it sure wasn't the Scotch. Not just one double.

The casino, to me, faded into obscurity. Mists enclosed it all and then cleared, revealing the Mindmaster and the two draped forms on Tau Ceti II.

Nelot suddenly looked directly at me and placed a finger on his lips to enjoin silence. Then he drew back the covering from the face of the recumbent man.

So help me, it was me! Same shock of brown hair, same high cheekbones and square jaw, same straight (I'd always thought almost, but not quite aristocratic) nose. On him it was aristocratic. This was Bor, and Nelot redraped his face gravely as the body remained motionless.

Then the Mindmaster proceeded to Arla and uncovered her head, swept back the unbelievably golden hair, (not blonde, not yellow, but really golden) and revealed a calm, almost perfectly chiseled profile. Skin ivory, satiny smooth, forehead high, chin firm and cherry lips pursed in the hint of a pout. There was a slight intimation of pertness in the almost imperceptibly retroused nose.

"Just so you'll know . . ." Nelot was whispering.

The mists swirled again, then vanished, and a local voice reached me from the registration desk. An unpleasant one. I saw that an expensively dressed young girl was taking some guff from the clerk, and I burned. So help me again, hers was Arla's profile! And the slight pout of the lips was atremble — she was about to cry.

I got there fast. "What goes on?" I demanded of the clerk.

"It's none of your business," he said haughtily.

I leaned over and yanked his collar awry. "I'm making it my business, you lug!" I turned to the girl, who was white and shaky.

"They locked me out of my room," she quavered.

"Why?" I yelled at the clerk.

"Non-payment of her bill," quoth he, trying to straighten his collar and glaring at me, "besides the IOU's."

"What IOU's?"

No answer. "I'm going to the manager!" I bawled, grabbing the now frightened girl and propelling her toward his door, which was marked in big letters, "PRIVATE."

"You can't go in there," the clerk squeaked.

But I could and did, pushing the girl ahead of me. "Can't you ask her to sit down?" I yammered at the portly manager.

He looked daggers at me, then seeing I sure meant business: "You may sit down, Miss Jones," he said grudgingly.

She sat, twisting her handkerchief.

"What the hell is this about?" I demanded of the fat one.

"She owes us sixty dollars for three days room rent, and there are the IOU's."

He consulted a ledger. "\$22,090.00 on the button. Plus our 60, of course."

"What?" I yelled. "What're they for — the IOU's?"

Gambling chits. At several casinos. They brought them here for collection, and Miss Jones says she can't pay. Besides, there's no such person; we checked the address she registered under. They — "

"Who're 'they?'" I asked him.

Again — evasively: "Just 'they.'"

"Yeah? How much do I have on deposit with you?" I asked, shoving the last \$1800.00 at him. "Including this?"

He counted it and added the figure to a page of the ledger. He seemed surprised as he replied, "\$22,900.00."

That's how I felt — surprised. How come it so nearly balanced?

"Pay her IOU's — and yourself," I told him.

The girl was frankly crying now, shaking her head vigorously at me to indicate a "no."

"Cut it out!" I told her. Then to the manager: "You get her room unlocked — pronto! — meaning, take out the plugs you put in the lock."

"Yes, sir." He reached for one of his phones.

"Miss Jones — " I began.

"Call me Jan," she said through the tears.

"And I'm Chuck, Chuck Radford. Let's go!"

At the desk I asked for my key — and hers. They were 2929 and 2930 — adjoining rooms! Coincidence? Not by a damn sight.

This gave me pause, and a small voice confirmed that it had been planned that way. I was two people again — or something.

The clerk grinned as he passed over the keys.

"And wipe that idiotic smirk off your puss!" I gritted, "or I'll bash your teeth down your throat."

He looked and acted like a wooden puppet after that.

The elevators here were automatic, of course; and as the girl stepped through the open door it almost shut in my face before I was able to get in after her. I forced it back and was in. The little 29 square was already lighted as the door closed and the car started up.

It was then I saw the hoodlum in the corner, with a wicked looking snub-nosed automatic weaving to cover first the girl and then me.

"This is a snatch!" he declared, "and you, dude, keep the hell out of it or you'll get it first."

I'd get it anyway, I decided — if he could manage. He wasn't going to leave any witness alive. So, glad that I'd kept up with my judo and karate practice, I chopped down on his wrist before he could move or pull the trigger. He screamed as the wrist snapped and the gun boomed, making a neat round hole in the floor. I chopped again, first intending to get him directly beneath that crooked nose, a chop that might well have proved fatal. So I dropped my swing and hit his throat with the

edge of my stiffened hand instead. His eyes popped, his face purpled and he fell to the floor in agony.

For good measure, I kicked his temple. Hard. And he was out.

This was when Jan fainted. We were still rising: 18, 19, 20. I grabbed the emergency phone with the girl draped over my other arm and told the operator: "Send your house dick up to floor 29. He'll find a gunsel — a would-be killer — in elevator six. Out cold. I'll block the elevator at 29."

I carried Jan to 2930 and deposited her limp form on one of the full-sized beds. The room was a duplicate of mine next door, and I unbolted the connecting door on her side, then went over and did the same on mine. No wrong intention, you understand, only good. Jan needed help now — and protection. Like Nelot had said of Arla.

Turning out the bright overhead lights, leaving only her bedlamp burning, I returned to my own room. But not for long.

"Chuck," she called, her voice sounding fuzzy and uncertain.

When I returned to her room, she was sitting on the edge of the bed, swaying slightly. "Where am I?" she asked dazedly.

"In your own room," I told her, "and I'm right next door. So don't be afraid of anything — especially of me. And I want you to go to bed now and get the rest you need. I'm leaving the connecting door ajar, and you call me if you need me. Any time of the night."

Suddenly I was very tired myself.





"All right, Chuck," she agreed submissively. "Thanks again and good night."

"I'm going to tub now and turn in myself," I told her, almost losing my balance as I went through into my own room. "Good night."

It was then I remember that Jan's eyes, though blue, seemed to have golden glints in them when tears were in their corners. That her hair, chestnut brown, had glinted golden at certain angles under the bedlamp. What it all meant I couldn't imagine.

I shook my head to clear it.

Later, as I lay between the cool sheets and was about to doze off, I thought I heard movement in Jan's room. But there wasn't any light, in either room. Only a stray moonbeam streaked across my floor. I was imagining things again. Or was I?

But the patter of soft feet on thick carpeting couldn't be mistaken, and then my covers moved and someone slid in beside me.

"Jan?" I husked, unbelievably.

"Yes," a small voice replied.

I still couldn't believe it. My hand strayed hesitantly toward her and touched smooth, warm, naked flesh. I yanked the hand back as if I had burned it.

Now look, I'm no Don Juan nor even an avid girl-watcher. At the same time I haven't reached the age of thirty entirely celibate. My physical reaction was swift and urgent, as would be that of any normal healthy male. There wasn't any small voice to say no, and I didn't need one. I said it to myself — sternly.

"What're you doing here?" I asked her.

"Why I . . . I . . . thought . . . after all you saved my life in the elevator. You — you paid my — "

"And now you think you owe me . . . this — "

"Ye-yes." A barely audible whisper.

"Sure you know what you're doing?"

"Y-yes. I know."

"How old are you?"

"Al-most twenty-one."

"Married?"

"No." —

"Then you're a virgin." It was a statement, not a question.

"Y-yes."

I burned. "Get out of here," I snapped. "Out of my bed, Jan. Before I change my mind."

She got. Swiftly. The soft patter of her running feet left me sweating. Then I heard her sobbing softly over there in her own room. I felt like a heel, and I'll never tell you why.

I lay there quaking as the sobs died down in the stillness. Utter stillness. It spooked me, and I listened. Hard. In a little while I thought I heard movement again over there. I padded softly to the connecting door, following a moonbeam from floor to open window, through which it shone. And there on the sill was a girl-figure, clearly outlined through a sheer nightie against the light of the moon. Her hair was golden.

Almost flinging myself across the intervening distance, trying to make

no noise that might startle her into making the fatal leap, I threw my arms around — nothing — which is what was there. Nobody. No gown. No girl. I was imagining things again.

Turning to the wall switch, I flooded the room with light. And there, in her own bed, curled up with the covers pulled tightly about her, was Jan. Looking plenty scared. And her eyes were as blue as the midday sky, her hair russet brown. With no sign of golden glints.

I began to breathe again.

"Oh, it's you, Chuck," she said, blinking. "What is it? Did I cry out in my sleep?"

"No. Just thought I heard a noise in here. Go back to sleep, my dear." I turned out the lights.

"Thanks some more, Chuck. And good night — again."

"Thank me not," was all I managed to say. "Good night."

Guess I'd meant to say something funny. Funny ha-ha, you know, not funny strange, but nothing occurred to me that'd fit.

Perhaps I was just too damned glad the swell kid didn't remember. Or had it been Jan in my bed at all? I'd never know for sure.

#### IV

I must have passed out as soon as I hit the hay . . .

Prince Bor and Princess Arla of Xenor were in each other's arms, and the Mindmaster was smiling with satisfaction as he watched them.

"She's completely cured," he assured Bor.

"Thanks to my host, Chuck," Bor said.

"And to my dear little hostess," Arla put in. "Really, my dear Bor, I think it was she who was most responsible for my cure. She was marvelous, and I hope the things I made her do won't get her into any trouble."

"Trouble? No — no trouble," said the Mindmaster.

"What can we do for them. Nelot?" asked Bor.

"Let me think, let me think." Nelot looked like a kindly old gentleman in a clerical robe. "We must and we can do real favors for them both. I shall think of something and arrange for it. Meanwhile, you two get out there on the balcony and show yourselves to your subjects. They're awaiting the good news — eagerly."

The mists closed in . . .

At 6:30 A.M. I woke up, feeling strangely alone. For a moment I couldn't remember where I was or why. Had I dreamed all this? I stumbled to the connecting door and found it locked on the other side. Knocking on it brought no response, so I tried the telephone.

"Room 2930 does not answer," the operator told me after long ringing. "Just a moment, Sir." Then, after a half minute: "Miss Jones checked out at six, Mister Radford."

The time it took me to shave, shower and dress was negligible.

There was no message in my box when I inquired downstairs — not a thing. She might at least have left a note, I thought on the spur of the

moment. But then I guessed it was just as well and I decided to chalk it off against experience — forget it.

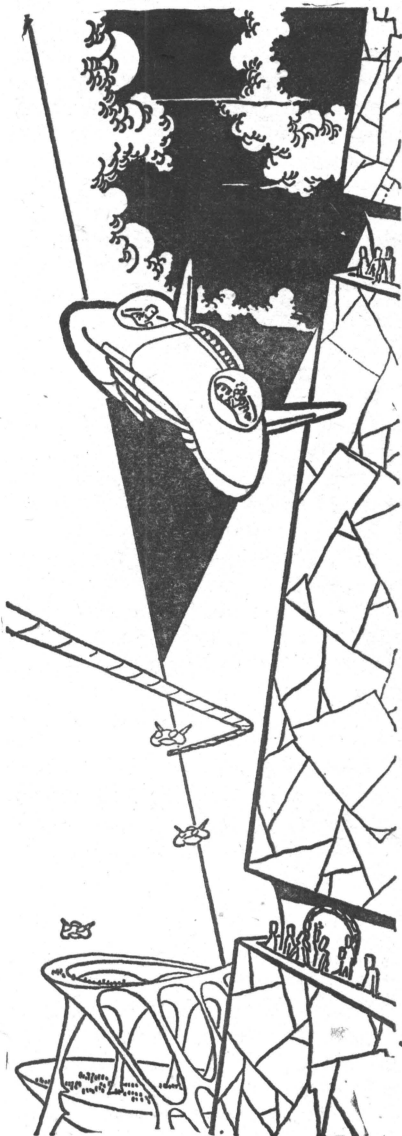
The money, you ask? Never would have felt right about the winnings anyway. I had to *earn* mine. Besides which, I knew that the Mindmaster out there — and Bor — really managed the phenomenal luck.

In another hour I was on a plane for L.A. The weather was beautiful, and the passengers either grumpy or mirthful, depending on what their luck had been. Which meant that most of them were quiet, staring out the windows. Only about three besides the hostesses wore smiles.

Then everything changed. I was in one of those little aircars of Xenor, heading over the city toward the palace. The streets below were in uproarious celebration, long streamers draped the buildings and fluttered over the milling crowds. The Small Folk, flitted everywhere, caroling. Even the sun seemed to be more brilliant, and Mount Leo's halo spun and tilted crazily.

Bor and Arla stood on the balcony, and the multitude in the plaza was jubilant. Shouting, dancing, hugging one another indiscriminately. If this was in L.A., the police would be wondering when to step in.

Unexpectedly and mysteriously, then, I was in the Mindmaster's mind, and he was in mine. He stood behind the prince and princess, and for a short time I was seeing through his eyes and hearing through his ears how the joyous celebrants in the plaza down there were making known their love for their princess and her consort.



The two objects of their subjects' acclaim remained enclasped and were obviously the happiest couple in Xenor. Perhaps in all of Tau Ceti II. That they were very much in love with each other and with their people was patent.

The aircar I occupied took a sudden leap and zoomed upward at incredible speed as Nelot's thinking told me we would visit selected spots on the daylight side of his planet. Which is what happened. As in one of our travelogues, I saw and sensed and heard the land of this world at various points and from many angles. Now we were over an inky sea that I knew separated us from the only other continent. Over hundreds of kilometers of well kept blue and orange farm lands with prim living and service buildings. The rose-misted mountains provided a background for it all, and then we swooped down into another colorful city with tall pyramidal buildings and parades and celebrations much the same as in Xenor. I learned that their language was different here. The people, too, were proportioned differently, being shorter and with broader features. But the Small Folk were everywhere, the same here and just as happy.

Now we were in a purple jungle, sweeping over waving fronds of tall feathery growths. Down into a clearing where nearly naked, deeply tanned, natives performed a joyous dance about what looked to be a three-meter-tall layer cake with images of their rulers, the prince and princess, topping it all.

The tour continued, and I practically felt my eyes bugging from my head. But the Mindmaster's thoughts held me in complete enthrallment.

"We've seen enough," he at length conveyed, "enough so you know how truly grateful are our people. To you and to the one you call Jan we have caused to be engraved medals which convey our humble thanks — in your own tongue — for your invaluable help."

He pressed a heavy packet into my hands before I could object or reply and concluded: "For your part and hers in the cure of our princess. For our own sent . . ."

A soft hand was tapping my shoulder, a soft voice telling me, "We are over Los Angeles and will land in Ontario Airport in ten minutes, Sir. Please fasten your seat belt." A smiling hostess.

The little aircar had multiplied in size and completely changed character. I saw up front the lighted sign: PLEASE FASTEN SEAT BELTS. NO SMOKING. It was one of our own airliners. But the heavy packet, with its outworldly wrappings, was on my knees.

Having parked my Thunderbird out back, I came into my office through the rear door and didn't notice for a moment that I had a visitor — a big character who sprawled all over my best leather-upholstered client's chair.

"Who're you and how'd you get in?" I asked all in one breath.

"Pushed past your gal out front. She said you was away, and she

didn't seem to know or care when you'd be back. So I told her I'd wait right here if it was for a week."

Then I got a good look at him. Fiftyish. A character all right, but he did have a disarming grin. Ten gallon hat, which he never bothered to take off, cowboy rig that fitted him badly over his generous pouch, and — so help me! — high heeled boots with spurs!

He tossed a card expertly to my desk top and stood up. The card read: **JEFFERS AND PELL, ENGINEERS AND CONSTRUCTORS, BAKERSFIELD, CAL.**

"I'm Jeffers," he declared, rising and sticking out a big horny paw. "Senior partner." They were a well known, well thought of outfit.

I evaded the grip, which I could see was meant to be crushing, and a quick thumb-bend brought him to one knee, red-faced.

"Sorry," I said. But I wasn't.

"Must have slipped," he mumbled as he got up.

I could have sworn I heard a muffled feminine giggle. I'd have Miss Bailey on the carpet if I found she'd been eavesdropping.

"Now what might be your business, *Mister Jeffers*?" I was again back of my desk, and he in the chair.

He guffawed and I simply had to laugh with him, this buffon.

Then he sobered. "I'm offering you a contract, a job. You know we have the reinforcing steel mostly welded up and are almost ready to start pouring concrete on the Kern County Dam, I suppose?"

"Yes, I know that."

Jeffers lowered his voice. "I want

you to make a complete inspection now and after the dam is completed. The fee is fifty grand, and I'll add 25 more if you — well — overlook a few things."

"You mean you're cutting down on materials, on quality, even on workmanship — and want me for a cover-up."

The man hemmed a little, reddened anew. "Y-you might say that."

This time I didn't merely burn; I blazed: "Go plumb to hell, will you? And get out of here fast!"

The reaction was amazing. Jeffers fell out of the chair, yelling with laughter, holding his sides as he rolled over and over on my best rug. "You'll do, you'll do, young fellow!" he roared.

Then, from the washroom stepped a vision, if ever there was one.

"Jan!" I shouted, then halted my rush toward her.

She was bending over Jeffers, helping him back to his chair. "See, daddy," she exulted. "Didn't I tell you?"

As she stood up to face me, I guess I stared like a stupe. She was the living image of Bor's princess Arla in far-off Xenor. Excepting for color of eyes and hair — the image. Same faultless ivory skin, same traffic-stopping figure. But what was this daddy business?

"I'm Joyce Jeffers," she explained before I could ask. "And I had to prove two things to daddy. First *you*. He didn't believe there was a young engineer from LA with in-integrity like I described. And then I had to prove I'd had amnesia."

"Amnesia?" I felt still more stupid.

"Yes, and I suppose this seems strange to you too, but from the time I left home until that — that night I wasn't Joyce Jeffers but Janice Jones. And yet now I remember — well most all — what happened during the Vegas days. Only sometimes I was Jan and sometimes — Arla."

"Arla? You know then?" I moved closer to the vision.

The long lashes dropped, then raised again so she could regard me as I thirstily took her in from the top of her faultless coiffure to her silken knees, calves, ankles. "Yes Bor," she whispered.

"Geel!" I exclaimed like a schoolboy. Her dad was looking on with a broad grin on his puss.

"Beat it, Pop," I told him, and he tippy-toed toward the outer door.

She arched those pouty, kissable red lips, revealing glistening white teeth in a dazzling but really human and understanding smile. Her face was turned up to mine, and she was so close now that the scent she used was strong in my nostrils.

What was a guy supposed to do? Just what I did, and thoroughly. Hungrily. For this is what I had

spent all my previous life to earn — without knowing it.

Time stood still, but at length we were in this world and had opened the packet from Tau Ceti II and were examining its contents hand in hand and with our heads very close together.

There were two beautifully executed medallions, made of an extremely heavy metal that looked like platinum but was iridescent. Most beautifully engraved on these were the words the Mindmaster had hinted at. Joyce's name was correct and correctly spelled. So was mine, even to the "Charles," which I detested but put up with. This Nelot knew much more about us than we did ourselves.

The left edge of my medallion was notched to slip into and form a supplement to Joyce's. In fact when the two slid together it was like a single larger plaque.

"Why don't we?" breathed Joyce.

"First preacher I can get," said I.

And we agreed afterward that we had then heard a trio of delighted musical chuckles, one bass, one tenor, and the other a rich contralto. Besides a cheery chorus of flutterings and the exultant chant: "*We knew. We knew.*"

END

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Dear Editor:

IF is one of my favorite SF magazines — and it's also one of the worst magazines on the market. "A story done well — based on a poor subject is more salable than a good story done around a good idea — when the latter is written without any skill." Now I'm not saying that IF has no time or effort put into it — evidently quite a lot of work goes into the mag — work is needed to produce anything approaching a magazine. However, it's apparent that not enough work goes into IF.

You, Mr. Pohl, should not be content to let a writer develop all by himself. If it looks like you're getting a new author that has some potential, work with him a little bit — Dannie Plachta came up with his first decent story in the July, 1966, issue. And it's pretty visible that the development of this new writer has been through the work of the author alone.

Looking back at Robert A. Heinlein's *The Moon is a Harsh Mistress*, you can see a story that could have been vastly improved with a little editorial help. Heinlein looked like he was coming back into the swing-of-things with this one. And then what does he do for a conclusion? He gives a lecture.

Boy, what a let down.

You, Mr. Pohl, could have shown Heinlein what the public wanted. Through a discussion between myself and several other fans it has been decided that Heinlein's big problem has been his conclusions. Look at the racially biased *Sixth Column* (in paperback: *The Day After Tomorrow*) at least the ending continues and concluded the plot.

I'm not saying that our hard-working editor, (alias Frederik Pohl) should have forced Heinlein to peddle his piece to another mag — but what I do say is this:

Work with your magazines. Impress your personality upon your magazines. If you have an author that looks like a prospective Giant in the Earth, work with the man. And work with the authors so that we can have more stories that fit into IF and give the audience more to appreciate.

IF is an extremely weird position; this is the only magazine that can bridge the gap between "Quality" science fiction and science fiction for "Entertainment". That bridge is your best bet. And the bridge can only be built through a lot of hard work on the part of the editor.

Cross "entertaining" stories with quality materials, and what have you got? You've got the most popular type of story in a growing genre.



This cross is the thing that's going to bring an increase in circulation — not the advertisements for the "Rosicrucians."

Oh yeah — in "Hue and Cry", let the heading of each letter be what the writer originally intended it to be. This letter is not headed with "Dear Editor", and that heading just looks a little too much like something out of a comic book. In other words, don't change the headings for uniformity's sake. There's all ready too much conformity — and all that kind of junk. Besides, different headings should help the development of the mag's personality.—Jim Young, 1948 *Ulysses* Street N.E., Minneapolis, Minnesota 55418.

\* \* \*

Dear Editor:

I noticed Mr. Arthur C. Clarke's letter in the June *If*. There is indeed a story entitled *The Anticipator* which ends with the line, "And the anticipator, horribly afraid, ran down a by-street." It is not by H. G. Wells, however. It is by Morley Roberts and appeared in his *The Grinder's Wheel* (Nelson, 1907) and was reprinted in Dorothy L. Sayers' *The Omnibus of Crime* (Harcourt, Brace and Co., 1929), which is where I found it. This is all the information I have about the story.

I suggest that you refuse to pass this information on to Arthur C. Clarke, at least until he agrees to write a new novel which will be serialized in *If*.

I thought that the style of Mr. Leslie A. Reece's letter in the same issue seemed unpleasantly familiar. When I checked the address I discovered, lo and behold, that Mr. Reece has the same address as Stephen E. Pickering, who writes in the same pointlessly polysyllabic

fashion as Mr. Reece. Is this the reason, perhaps, that Mr. Reese bemoans the fact that fans "have completely ignored . . . writings of the fan-sociologist Stephen Pickering . . ."? Has the secret identity of Stephen Pickering been unveiled?

Now that you have Andre Norton and Samuel Delany in *If*, don't let them get away. I must, however, say that *Driftglass* was far below Delany's usual high standards.

When the heck are we going to get the next HEINLEIN novel? — Hank Davis, 361 Linden Walk, Lexington, Kentucky 40508.

● You'll get the next Heinlein the minute we can bring it to you — but when that will be is anyone's guess. The counfounded man is building himself a new house, and until that's done, no novels!

Incidentally, the identity of the "Wells" story was tracked down also by Robert A. Gould, Frank McSherry, Jr., Robert Coulson, Dean McLaughlin, Donald Franson and — oh, yes, Arthur Clarke himself, shortly after we printed his letter. —Editor.

\* \* \*

Dear Editor:

I started reading *If* about five years ago when it was in the doldrums and have watched it grow and grow until now it is the finest science-fiction mag around. In fact, I have been reading *If* for so long that I feel like one of the oldtimers. I have just finished *The Iron Thorn* and, although I have reservations, consider it one of the finest sci-fi novels I have ever read.

Budrys's work has always been good, and his only fault was that he did not write often enough, a fault which you seem to be correcting. Let me add that he is also my favorite book critic. It is a pleasure

to read someone who does not indiscriminately recommend every sci-fi book on the market. If I bought every book the other reviewers recommended, I would soon be poverty-stricken. So Budrys's column comes as a breath of fresh air. However, I intended to write about Budrys the author, not Budrys the critic, and I do have one criticism of *The Iron Thorn*. After all the care with which Budrys built up the complex society of Amsirs and humans, and the fascinating odyssey of Honor Jackson to Earth, the final chapters come as a disappointment. I do not know what I expected, but certainly not the same sterile society seen before in countless inferior novels, and presented in such a dull fashion. Up to this point *The Iron Thorn* had been fresh and inventive, but suddenly the author's imagination deserts him. I feel that Budrys, who has always taken the trouble to create real people for his stories, spent so much time in characterization and striving to avoid the usual space-opera clichés, that he forgot about his plot. By the time the novel ends, nothing is resolved, either on Earth or Mars. I would like to know what happened between the Amsirs and the humans after Jackson left Mars, and I would like to see more of Jackson's adventures on Earth. It seems to me that the author ended *The Iron Thorn* before he finished his story. Of course, there is always the possibility that I am criticising Budrys for writing a different story from that which he wanted to write, in which case I apologize, but I still think that the last quarter of *The Iron Thorn* does not measure up to the first three quarters.

Turning to another topic, a recent article in *Variety* reports that *Star*

*Trek* has been renewed for next season which surely comes as good news to all *If* readers. It is a pleasure to see good science fiction on TV after being inundated with tripe like *Lost In Space* and *The Time Tunnel*. The latter is not even science fiction, but an adventure series with a "you are there" gimmick. Your letter column has been full of comments on *Star Trek* and TV sci-fi, but no one ever writes about those recent movies: *The Fantastic Voyage* and the great *Fahrenheit 451*. Don't fans go to the movies any more? — Patrick Swift, 2870 Marion Avenue, Bronx, New York 10458.

\* \* \*

Dear Editor:

This thing about your artwork for *If* has been going on for quite some time now, and I don't see where anything has changed; at least not for the better. I remember back when *Galaxy* was just starting out, in an editorial, the editor (H. L. Gold) said something like, "In this issue, you can see the changes that you, the readers, have voted for."

Now I feel that even though that was way back in the fourth issue of *Galaxy*, I think that you still wish to live up to your old policy. After all, it is us readers that keep your magazine going! So why not take a poll, and see what changes the readers would like? I know that you can't please all the readers all the time, but I'm sure that most of the readers would like to see a change in the artwork in *If*. Why not ask them and see?! Do us both a favor, publish this letter in *Hue & Cry*, and see what the rest of your readers think.

While your art isn't the best, your stories are, and they won you your Hugo. Keep up the good stor-

ies, and you will get another Hugo. Just another reason to improve your art; why can't a first-class magazine (which is what the Hugo represents) have first-class art?

Glad to see that you have Philip Jose Farmer coming up in *If*. He has to be one of the most original authors living! And his "River-world" series is great. Another good writer that seems to do quite a lot for you is Larry Niven.

One last thing, do you see the publishing of your and Mr. Williamson's novel, *Rogue Star*, anytime soon?—Randall Richmond, 10502 Shadow Wood Drive, Houston, Texas 77043.

● Some time in the next few months — we hope. It would have been running by now but we keep getting stories by others that politeness directs us to run first!—*Editor*.

\* \* \*

Dear Editor:

Wherever you're keeping *If's* Hugo, make room for more. On the basis of the first five issues of 1967, especially the March issue, you've got it made.

Your habit of overlapping serials is a superb one, especially when you have serials by Budrys, Chandler and Laumer. Terry Carr and Larry Niven are the finds of the year . . . any year. And then there is the Berserker series by Fred Saberhagen. You've performed an invaluable service by encouraging new authors.

Oh, yes. You hinted at the possibility of an addition to your line-up of magazines — then silence. What's cooking? — David Charles Paskow, 817 West 66th Avenue, Philadelphia, Pennsylvania 19126.

● Coming off the back burner soon: *International Science Fiction*, the same being a new magazine devoted

to publishing stories from other parts of the planet Earth, as for instance Russia, Germany, France, Australia, etc. — *Editor*.

\* \* \*

Dear Editor:

*If's* policy of giving new writers their start is paying off: *The Soft Weapon*, by Larry Niven, is one of the best sf stories, by a new or old writer, that I have ever read. If I may be sacrilegious, I think it's as exciting as anything Asimov or Clarke or Heinlein has ever done.

One question: since the February issue came out in 1966, is *The Soft Weapon* eligible for awards for '66 or '67? — Jeff Rensch, Webb School, Claremont, California 91711.

● For 1967, according to our reading of the rules . . . and we agree that it's a worthy nomination!

That does us for another month. This month's "first" is *To Serve The Masters*, by Perry A. Chapdelaine, a mathematics professor from Tennessee. We don't often run a writer's maiden effort as long as this one . . . but we don't often get one like *To Serve the Masters*, either!

In case you missed the earlier discussions, what these "firsts" are all about is simply that every issue we bring you at least one writer who has never been in print with a science-fiction story before. Where do they come from? In the mail — submitted to *If* at its regular editorial office, neatly typed, double-spaced, white paper, with stamped self-addressed return envelope enclosed. Are they required to follow special rules? No; they are considered along with stories by our regulars and have to compete with them for interest. Who do they come from? Why, often enough, someone very much like you. . . .

THE EDITOR

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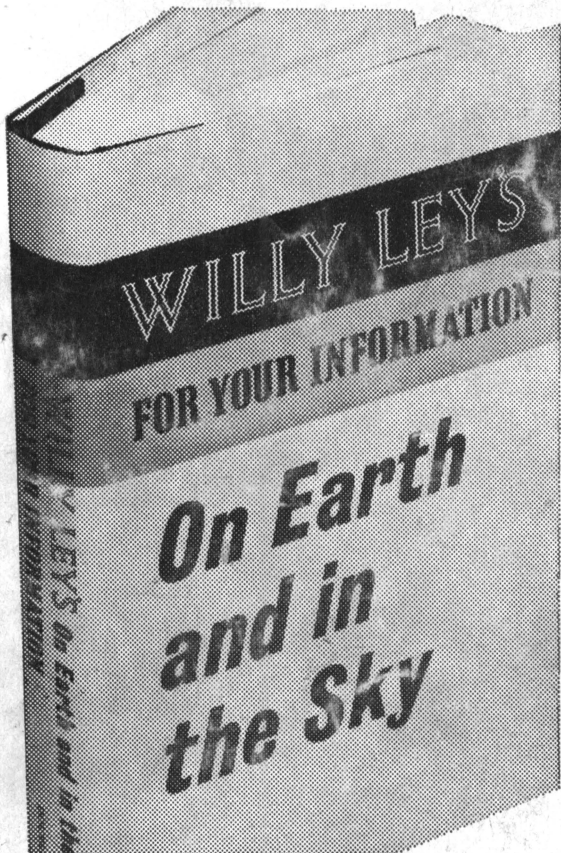
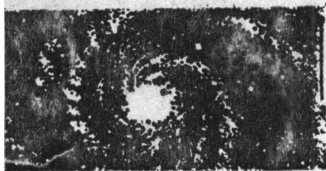
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