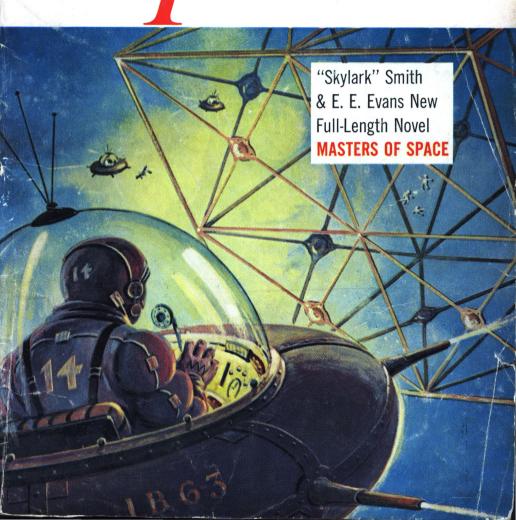
At The End Of The Orbit • by Arthur C. Clarke worlds of Clence november, 1961

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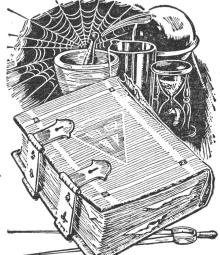
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# science fiction

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#### **PART ONE**

# MASTERS OF SPACE

By EDWARD E. SMITH & E. E. EVANS

Illustrated by BERRY

The Masters had ruled all space with an unconquerable iron fist. But the Masters were gone. And this new, young race who came now to take their place — could they hope to defeat the ancient Enemy of All?

T

"BUT didn't you feel anything, Javo?" Strain was apparent in every line of Tula's taut, bare body. "Nothing at all?"

"Nothing whatever." The one called Javo relaxed from his rigid concentration. "Nothing has changed. Nor will it."

"That conclusion is indefensible!" Tula snapped. "With the promised return of the Masters there must and will be changes. Didn't any of you feel anything?"

Her hot, demanding eyes swept the group; a group whose like, except for physical perfection, could be found in any nudist colony. No one except Tula had

felt a thing.

"That fact is not too surprising," Javo said finally.

"You have the most sensitive receptors of us all. But are you sure?"

"I am sure. It was the thought-form of a living Master."

"Do you think that the Master perceived your web?"

"It is certain. Those who built us are stronger than we."

"That is true. As they promised, then, so long and long ago, our Masters are returning home to us."

Jarvis Hilton of Terra, the youngest man yet to be assigned to direct any such tremendous deep-space undertaking as Project Theta Orionis, sat in conference with his two seconds-in-command. Assistant Director Sandra Cummings, analyst-synthesist and semantician, was tall,

and semantician, was tall, blonde and svelte. Planetographer William Karns—a black-haired, black-browed, black-eyed man of thirty—was third in rank of the sci-

entific group.

"I'm telling you, Jarve, you can't have it both ways," Karns declared. "Captain Sawtelle is old-school Navy brass. He goes strictly by the book. So you've got to draw a razor-sharp line; exactly where the Advisory Board's directive puts it. And next time he sticks his ugly puss across that line, kick his face in. You've been Caspar Milquetoast Two ever since we left Base."

"That's the way it looks to you?" Hilton's right hand became a fist. "The man has age, experience and ability. I've been trying to meet him on a ground of courtesy and decency."

"Exactly. And he doesn't recognize the existence of either. And, since the Board rammed you down his throat instead of giving him old Jeffers, you needn't expect him to."

"You may be right, Bill. What do you think, Dr. Cummings?"

The girl said: "Bill's right. Also, your constant appeasement isn't doing the morale of the whole scientific group a bit of good."

"Well, I haven't enjoyed it, either. So next time I'll pin his ears back. Anything else?"

"Yes, Dr. Hilton, I have a squawk of my own. I know I was rammed down your throat, but just when are you going to let me do some work?"

"None of us has much of anything to do yet, and won't have until we light somewhere. You're off base a country mile."

"I'm not off base. You did want Eggleston, not me."

"Sure I did. I've worked with him and know what he can do. But I'm not holding a grudge about it."

"No? Why, then, are you on first-name terms with everyone in the scientific group except me? Supposedly your first assistant?"

"That's easy!" Hilton snapped. "Because you've been carrying chips on both shoulders ever since you came aboard...or at least I thought you were." Hilton grinned suddenly and held out his hand. "Sorry, Sandy—I'll start all over again."

"I'm sorry too, Chief." They shook hands warmly. "I was pretty stiff, I guess,

but I'll be good."

"You'll go to work right
now, too. As semantician. Dig
out that directive and tear it

by Edward E. Smith & E. Everett Evans

down. Draw that line Bill-talked about."

"Can do, boss." She swung to her feet and walked out of the room, her every movement one of lithe and easy grace.

Karns followed her with his eyes. "Funny. A traineddancer Ph.D. And a Miss America type, like all the other women aboard this spacer. I wonder if she'll make out."

"So do I. I still wish they'd given me Eggy. I've never seen an executive-type female Ph.D. yet that was worth the cyanide it would take to poison her."

"That's what Sawtelle thinks of you, too, you know."

"I know; and the Board does know its stuff. So I'm really hoping, Bill, that she surprises me as much as I intend to surprise the Navy."

ALARM bells clanged as the mighty Perseus blinked out of overdrive. Every crewman sprang to his post.

"Mister Snowden, why did we emerge without orders from me?" Captain Sawtelle bellowed, storming into the control room three jumps behind Hilton.

"The automatics took control, sir," he said, quietly.

"Automatics! I give the orders!"

"In this case, Captain Sawtelle, you don't," Hilton said. Eyes locked and held. To Sawtelle, this was a new and strange co-commander. "I would suggest that we discuss this matter in private."

"Very well, sir," Sawtelle said; and in the captain's cabin Hilton opened up.

"For your information, Captain Sawtelle, I set my inter-space coupling detectors for any objective I choose. When any one of them reacts, it trips the kickers and we emerge. During any emergency outside the Solar System I am in command—with the provision that I must relinquish command to you in case of armed attack on us."

"Where do you think you found any such stuff as that in the directive? It isn't there and I know my rights."

"It is, and you don't. Here is a semantic chart of the whole directive. As you will note, it overrides many Navy regulations. Disobedience of my orders constitutes mutiny and I can—and will—have you put in irons and sent back to Terra for court-martial. Now let's go back."

In the control room, Hilton said, "The target has a mass of approximately five hundred metric tons. There is also a significant amount of radiation characteristic of uranexite. You will please execute search, Captain Sawtelle."

And Captain Sawtelle ordered the search.

"What did you do to the big jerk, boss?" Sandra whispered.

"What you and Bill suggested," Hilton whispered back. "Thanks to your analysis of the directive—pure gobbledygook if there ever was any—I could. Mighty good job, Sandy."

TEN or fifteen more minutes passed. Then:

"Here's the source of radiation, sir," a searchman reported. "It's a point source, though, not an object at this range."

"And here's the artifact,

sir," Pilot Snowden said.
"We're coming up on it fast.
But...but what's a skyscraper skeleton doing out here in

interstellar space?"

As they closed up, everyone could see that the thing did indeed look like the metallic skeleton of a great building. It was a huge cube, measuring well over a hundred yards along each edge. And it was empty.

"That's one for the book,"

Sawtelle said.

"And how!" Hilton agreed.
"I'll take a boat...no, suits
would be better. "Karns, Yarborough, get Techs Leeds and
Miller and suit up."

"You'll need a boat escort," Sawtelle said. "Mr. Ashley, execute escort Landing Craft One, Two, and Three."

The three landing craft approached that enigmatic lattice-work of structural steel and stopped. Five grotesquely armored figures wafted themselves forward on pencils of force. Their leader, whose suit bore the number "14", reached a mammoth girder and worked his way along it up to a peculiar-looking bulge. The whole immense structure vanished, leaving men and boats in empty space.

Sawtelle gasped. "Snow-den! Are you holding 'em?"

"No, sir. Faster than light; hyperspace, sir."

"Mr. Ashby, did you have your interspace rigs set?"

"No, sir. I didn't think of

it, sir."

"Doctor Cummings, why weren't yours out?"

"I didn't think of such a thing, either—any more than you did," Sandra said.

Ashby, the Communications Officer, had been working the radio. "No reply from anyone, sir," he reported.

"Oh, no!" Sandra exclaimed. Then, "But look! They're firing pistols—especially the one wearing number fourteen—but pistols?"

"Recoil pistols—sixty-threes—for emergency use in case of power failure," Ashby explained. "That's it...but I can't see why all their power went out at once. But Four-teen—that's Hilton—is really doing a job with that sixty-

three. He'll be here in a couple of minutes."

And he was. "Every power unit out there—suits and boats both—drained," Hilton reported. "Complete-ly drained. Get some help out there fast!"

In an enormous structure deep below the surface of a far-distant world a group of technicians clustered together in front of one section of a two-miles long control board. They were staring at a light that had just appeared where no light should have been.

"Someone's brain-pan will be burned out for this," one of the group radiated harshly. "That unit was inactivated long ago and it has not been reactivated."

"Someone committed an error, Your Loftiness?"

"Silence, fool! Stretts do not commit errors!"

As soon as it was clear that no one had been injured, Sawtelle demanded, "How about it, Hilton?"

"Structurally, it was highalloy steel. There were many bulges, possibly containing mechanisms. There were drive-units of a non-Terran type. There were many projectors, which—at a rough guess—were a hundred times as powerful as any I have ever seen before. There were no indications that the thing had ever been enclosed, in whole or in part. It certainly never had living quarters for warm-blooded, oxygen-breathing eaters of organic food."

Sawtelle snorted. "You mean it never had a crew?"

"Not necessarily..."
"Bah! What other kind of

"I don't know. But before we speculate too much, let's look at the tri-di. The camera may have caught something I missed."

It hadn't. The three-dimensional pictures added nothing.

"It probably was operated either by programmed automatics or by remote control," Hilton decided, finally. "But how did they drain all our power? And just as bad, what and how is that other point source of power we're heading for now?"

"What's wrong with it?"

Sawtelle asked.

"Its strength. No matter what distance or reactant I assume, nothing we know will fit. Neither fission nor fusion will do it. It has to be practically total conversion!"

#### II

THE Perseus snapped out of overdrive near the point of interest and Hilton stared, motionless and silent.

Space was full of madly warring ships. Half of them were bare, giant skeletons of steel, like the "derelict" that had so unexpectedly blasted away from them. The others were more or less like the Perseus, except in being bigger, faster and of vastly greater power.

Beams of starkly incredible power bit at and clung to equally capable defensive screens of pure force. As those inconceivable forces met, the glare of their neutralization filled all nearby space. And ships and skeletons alike were disappearing in chunks, blobs, gouts, streamers and sparkles of rended, fused and vaporized metal.

Hilton watched two ships combine against one skeleton. Dozens of beams, incredibly tight and hard, were held inexorably upon dozens of the bulges of the skeleton. Overloaded, the bulges' screens flared through the spectrum and failed. And bare metal, however refractory, endures only for instants under the appalling intensity of such beams as those.

The skeletons tried to duplicate the ships' method of attack, but failed. They were too slow. Not slow, exactly, either, but hesitant; as though it required whole seconds for the commander—or operator? Or remote controller?—of each skeleton to make it act. The ships were winning.

"Hey!" Hilton yelped. "Oh —that's the one we saw back

there. But what in all space does it think it's doing?"

It was plunging at tremendous speed straight through the immense fleet of embattled skeletons. It did not fire a beam nor energize a screen; it merely plunged along as though on a plotted course until it collided with one of the skeletons of the fleet and both structures plunged, a tangled mass of wreckage, to the ground of the planet below.

Then hundreds of the ships shot forward, each to plunge into and explode inside one of the skeletons. When visibility was restored another wave of ships came forward to repeat the performance, but there was nothing left to fight. Every surviving skeleton had blinked out of normal space.

The remaining ships made no effort to pursue the skeletons, nor did they re-form as a fleet. Each ship went off by itself.

\* \* \*

And on that distant planet of the Stretts the group of mechs watched with amazed disbelief as light after light after light winked out on their two-miles-long control board. Frantically they relayed orders to the skeletons; orders which did not affect the losses.

"Brain-pans will blacken for this..." a mental snarl began, to be interrupted by a coldly imperious thought.

"That long-dead unit, so inexplicably reactivated, is approaching the fuel world. It is ignoring the battle. It is heading through our fleet toward the Oman half...handle it, ten-eighteen!"

"It does not respond, Your

Loftiness."

"Then blast it, fool! Ah, it is inactivated. As encyclopedist, Nine, explain the freakish behavior of that unit."

"Yes, Your Loftiness. Many cycles ago we sent a ship against the Omans with a new device of destruction. Omans must have intercepted it, drained it of power and allowed it to drift on. After all these cycles of time it must have come upon a small source of power and of course continued its mission."

"That can be the truth. The Lords of the Universe must

be informed."

"The mining units, the carriers and the refiners have not been affected, Your Loftiness," a mech radiated.

"So I see, fool." Then, activating another instrument, His Loftiness thought at it, in an entirely different vein, "Lord Ynos, Madam? I have to make a very grave report..."

TN the Perseus, four scien-Ltists and three Navy officers were arguing heatedly;

employing deep-space verbiage not to be found in any dictionary. "Jarve!" Karns called out, and Hilton joined the group. "Does anything about this planet make any sense to you?"

"No. But you're the planetographer. 'Smatter with it?" "It's a good three hundred

degrees Kelvin too hot."

"Well, you know it's loaded with uranexite."

"That much? The whole crust practically jewelry ore?"

"If that's what the figures

say, I'll buy it."

"Buy this, then. Continuous daylight everywhere. Noon June Sol-quality light except that it's all in the visible. Frank says it's from bombardment of a layer of something, and Frank admits that the whole thing's impossible."

"When Frank makes up his mind what 'something' is, I'll take it as a datum."

"Third thing: there's only one city on this continent, and it's protected by a screen that nobody ever heard of."

Hilton pondered, then turned to the captain. "Will you please run a search-pattern, sir? Fine-toothing only the hot spots?"

The planet was approximately the same size Terra; its atmosphere, except for its intense radiation, was similar to Terra's. There were two continents; one immense

girdling ocean. The temperature of the land surface was everywhere about 100°F, that of the water about 90°F. Each continent had one city, and both were small. One was inhabited by what looked like human beings; the other by usuform robots. The human city was the only cool spot on the entire planet; under its protective dome the temperature was 71°F.

Hilton decided to study the robots first; and asked the captain to take the ship down to observation range. Sawtelle objected; and continued to object until Hilton started to order his arrest. Then he said, "I'll do it, under protest, but I want it on record that I am doing it against my best judgment."

"It's on record," Hilton said, coldly. "Everything said and done is being, and will continue to be, recorded."

The Perseus floated downward "There's what I want most to see," Hilton said, finally. "That big strip-mining operation... that's it... hold it!" Then, via throat-mike, "Attention, all scientists! You all know what to do. Start doing it."

Sandra's blonde head was very close to Hilton's brown one as they both stared into Hilton's plate. "Why, they look like giant armadilloes!" she exclaimed.

"More like tanks," he disagreed, "except that they've

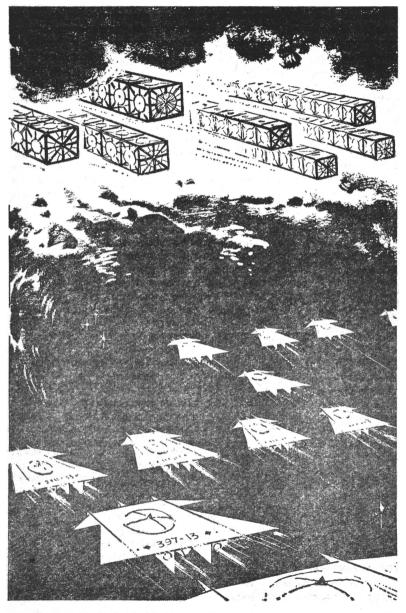
got legs, wheels and treads—and arms, cutters, diggers, probes and conveyors—and look at the way those buckets dip solid rock!"

The fantastic machine was moving very slowly along a bench or shelf that it was making for itself as it went along. Below it, to its left, dropped other benches being made by other mining chines. The machines were not using explosives. Hard though the ore was, the tools were so much harder were driven with such tremendous power that the stuff might just have well have been slightly-clayed sand.

Every bit of loosened ore, down to the finest dust, was forced into a conveyor and thence into the armored body of the machine. There it went into a mechanism whose basic principles Hilton could not understand. From this monstrosity emerged two streams of product.

One of these, comprising ninety-nine point nine plus percent of the input, went out through a nother conveyor into the vast hold of a vehicle which, when full and replaced by a duplicate of itself, went careening madly cross-country to a dump.

The other product, a slow, very small stream of tiny, glistening black pellets, fell into a one-gallon container being held watchfully by a small machine, more or less



MASTERS OF SPACE

like a three-wheeled motor scooter, which was moving carefully along beside the giant miner. When this can was almost full another scooter rolled up and, without losing a single pellet, took over place and function. The first scooter then covered its bucket, clamped it solidly into a recess designed for the purpose and dashed away toward the city.

Hilton stared slack-jawed at Sandra. She stared back.

"Do you make anything of that, Jarve?"

"Nothing. They're taking pure uranexite and concentrating—or converting—it a thousand to one. I hope we'll be able to do something about it."

"I hope so, too, Chief; and I'm sure we will."

"Well, that's enough for now. You may take us up now, Captain Sawtelle. And Sandy, will you please call all department heads and their assistants into the conference room?"

A T the head of the long conference table, Hilton studied his fourteen department heads, all husky young men, and their assistants, all surprisingly attractive and well-built young women. Bud Carroll and Sylvia Bannister of Sociology sat together. He was almost as big as Karns; she was a green-eyed redhead whose five-ten and one-fifty

would have looked big except for the arrangement thereof. There were Bernadine and Hermione van der Moen, the leggy, breasty, platinumblonde twins-both of whom were Cowper medalists in physics. There was Etienne de Vaux, the mathematical wizard; and Rebecca Eisentein, the black-haired, flashing-eyed ex-infant-prodigy theoretical astronomer. There was Beverly Bell, who made mathematically impossible chemical syntheses-who swam channels for days on end and computed planetary orbits in her sleekly-coiffured

"First, we'll have a get-together," Hilton said. "Nothing recorded; just to get acquainted. You all know that our fourteen departments cover science, from astronomy to zoology."

He paused, again his eyes swept the group. Stella Wing, who would have been a grand-opera star except for her drive to know everything about language. The odora (Teddy) Blake, who would prove gleefully that she was the world's best model—but was in fact the most brilliantly promising theoretician who had ever lived.

"No other force like this has ever been assembled," Hilton went on. "In more ways than one. Sawtelle wanted Jeffers to head this group, instead of me. Everybody

thought he would head it."

"And Hilton wanted Eggleston and got me," Sandra said.

"That's right. And quite a few of you didn't want to come at all, but were told by the Board to come or else."

The group stirred. Eyes met eyes, and there were smiles

66T myself think Jeffers ■ should have had the job. I've never handled anything half this big and I'll need a lot of help. But I'm stuck with it and you're all stuck with me, so we'll all take it and like it. You've noticed. course, the accent on youth. The Navy crew is normal, except for the commanders being unusually young. But we aren't. None of us is thirty yet, and none of us has ever been married. You fellows look like a team of professional athletes, and you girls-well, if I didn't know better I'd say the Board had screened you for the front row of the chorus instead of for a top-bracket brain-gang. How they found so many of vou I'll never know."

"Virile men and nubile women!" Etienne de Vaux leered enthusiastically. "Vive

le Board!"

"Nubile! Bravo, Tiny! Quelle delicatesse de nuance!"

"Three rousing cheers for the Board!" "Keep still, you nitwits! Let me ask a question!" This came from one of the twins.

"Before you give us the deduction, Jarvis—or will it be an intuition or an induction

"Or an inducement," the other twin suggested, helpfully. "Not that you would need very much of that."

"You keep still, too, Miney. I'm asking, Sir Moderator, if I can give my deduction first?"

"Sure, Bernadine; go ahead."

"They figured we're going to get completely lost. Then we'll jettison the Navy, hunt up a planet of our own and start a race to end all human races. Or would you call this a see-duction instead of a deeduction?"

This produced a storm of whistles, cheers and jeers that it took several seconds to quell.

"But seriously, Jar.vis," Bernadine went on. "We've all been wondering and it doesn't make sense. Have you any idea at all of what the Board actually did have in mind?"

"I believe that the Board selected for mental, not physical, qualities: for the ability to handle anything unexpected or unusual that comes up, no matter what it is."

"You think it wasn't double-barreled?" asked Kincaid, the psychologist. He smiled quizzically. "That all this virility and nubility and glamor

is pure coincidence?"

"No," Hilton said, with an almost imperceptible flick of an eyelid. "Coincidence is as meaningless as 'paradox. I think they found out that—barring freaks—the best minds are in the best bodies."

"Could be. The idea has

been profounded before."
"Now let's get to work."

Hilton flipped the switch of the recorder. "Starting with you, Sandy, each of you give a two-minute boil-down. What you found and what you think."

SOMETHING over an hour later the meeting adjourned and Hilton and Sandra strolled toward the control room.

"I don't know whether you convinced Alexander Q. Kincaid or not, but you didn't quite convince me," Sandra said.

"Nor him, either."

"Oh?" Sandra's eyebrows

went up.

"No. He grabbed the out I offered him. I didn't fool Teddy Blake or Temple Bells, either. You four are all, though, I think."

"Temple? You think she's

so smart?"

"I don't think so, no. Don't fool yourself, chick. Temple Bells looks and acts sweet and innocent and virginal. Maybe—probably—she is. But

she isn't showing a fraction of the stuff she's really got. She's heavy artillery, Sandy.

And I mean heavy."
"I think you're slightly nuts there. But do you really believe that the Board was

playing Cupid?"
"Not trying, but doing.

Cold-bloodedly and efficient-

ly. Yes."

"But it wouldn't work! We aren't going to get lost!"

"We won't need to. Propinquity will do the work."

"Phooie. You and me, for instance?" She stopped, put both hands on her hips, and glared. "Why, I wouldn't marry you if you..."

"I'll tell the cockeyed world you won't!" Hilton broke in. "Me marry a damned female Ph. D.? Uh-uh. Mine will be a cuddly little brunette that thinks a slipstick is some kind of lipstick and that an isotope's something good to eat."

"One like that copy of Murchison's Dark Lady that you keep under the glass on your desk?" she sneered.

"Exactly..." He started to continue the battle, then shut himself off. "But listen, Sandy, why should we get into a fight because we don't want to marry each other? You're doing a swell job. I admire you tremendously for it and I like to work with you."

"You've got a point there, Jarve, at that, and I'm one of the few who know what kind of a job you're doing, so I'll

relax." She flashed him a gamin grin and they went on into the control room.

It was too late in the day then to do any more exploring; but the next morning, early, the *Perseus* lined out for the city of the humanoids.

Tula turned toward her fellows. Her eyes filled with a happily triumphant light and her thought a lilting song. "I have been telling you from the first touch that it was the Masters. It is the Masters! The Masters are returning to us Omans and their own home world!"

**CAPTAIN** Sawtelle," Hilton said, "Please land in the cradle below."

"Land!" Sawtelle stormed.
"On a planet like that? Not by..." He broke off and stared; for now, on that cradle, there flamed out in screaming red the Perseus' own Navy-coded landing symbols!

"Your protest is recorded," Hilton said. "Now, sir, land."

Fuming, Sawtelle landed. Sandra looked pointedly at Hilton. "First contact is my dish, you know."

"Not that I like it, but it is." He turned to a burly youth with sun-bleached, crew-cut hair, "Still safe, Frank?"

"Still abnormally low. Surprising no end, since all the rest of the planet is hotter

than the middle tail-race of hell."

"Okay, Sandy. Who will you want besides the top linguists?"

"Psych—both Alex and Temple. And Teddy Blake. They're over there. Tell them, will you, while I buzz Teddy?"

"Will do," and Hilton stepped over to the two psychologists and told them. Then, "I hope I'm not leading with my chin, Temple, but is that your real first name or a professional?"

"It's real; it really is. My parents were romantics: dad says they considered both 'Golden' and 'Silver'!"

Not at all obviously, he studied her: the almost translucent, unblemished perfection of her lightly-tanned, old-ivory skin; the clear, calm, deep blueness of her eyes; the long, thick mane of hair exactly the color of a field of dead-ripe wheat.

"You know, I like it," he said then. "It fits you."

"I'm glad you said that, Doctor..."

"Not that, Temple. I'm not going to 'Doctor' you."

"I'll call you 'boss', then, like Stella does. Anyway, that lets me tell you that I like it myself. I really think that it did something for me."

"Something did something for you, that's for sure. I'm mighty glad you're aboard, and I hope...here they come.

Hi, Hark! Hi, Stella!"

"Hi, Jarve," said Chief
Linguist Harkins, and:

"Hi, boss—what's holding us up?" asked his assistant, Stella Wing. She was about five feet four. Her eyes were a tawny brown; her hair a flamboyant auburn mop. Perhaps it owed a little of its spectacular refulgence to chemistry, Hilton thought, but not too much. "Let us away! Let the lions roar and let the welkin ring!"

"Who's been feeding you so much red meat, little squirt?" Hilton laughed and turned away, meeting Sandra in the corridor. "Okay, chick, take 'em away. We'll cover

you. Luck, girl."

And in the control room, to Sawtelle, "Needle-beam cover, please; set for minimum aperture and lethal blase. But no firing, Captain Sawtelle, until I give the order."

THE Perseus was surrounded by hundreds of natives. They were all adult, all naked and about equally divided as to sex. They were friendly; most enthusiastically so.

"Jarve!" Sandra squealed.
"They're telepathic. Very strongly so! I never imagined—I never felt anything like

it!"

"Any rough stuff?" Hilton demanded.

"Oh, no. Just the opposite.

They love us...in a way that's simply indescribable. I don't like this telepathy business ...not clear...foggy, diffuse ...this woman is sure I'm her long-lost great-great-a-hundred-times grandmother or something—You! Slow down. Take it easy! They want us all to come out here and live with...no, not with them, but each of us alone in a whole house with them to wait on us! But first, they all want

to come aboard ."
"What?" Hilton yelped.
"But are you sure they're

friendly?"

"Positive, chief."
"How about you, Alex?"

"We're all sure, Jarve. No question about it."

"Bring two of them aboard.

A man and a woman."
"You won't bring any!"
Sawtelle thundered. "Hilton,
I had enough of your stupid,
starry-eyed, ivory-domed
blundering long ago, but this
utterly idiotic brainstorm of
letting enemy aliens aboard
us ends all civilian command.
Call your people back aboard
or I will bring them in by
force!"

"Very well, sir. Sandy, tell the natives that a slight delay has become necessary and bring your party aboard."

The Navy officers smiled—or grinned—gloatingly; while the scientists stared at their director with expressions ranging from surprise to disappointment and disgust.

Hilton's face remained set, expressionless, until Sandra and

her party had arrived.

"Captain Sawtelle," he said then, "I thought that you and I had settled in private the question of who is in command of Project Theta Orionis at destination. We will now settle it in public. Your opinion of me is now on record, witnessed by your officers and by my staff. My opinion of you, which is now being similarly recorded and witnessed, is that you are a hidebound, mentally ossified Navy mule; mentally and psychologically unfit to have any voice in any such mission as this. You will now agree, on this recording and before these witnesses, to obey my orders unquestioningly or I will now unload all Bureau of Science personnel and equipment onto this planet and send you and the Perseus back to Terra with the doubly-sealed record of this episode posted to the Advisory Board. Take your choice."

Eyes locked, and under Hilton's uncompromising stare Sawtelle weakened. He fidgeted; tried three times—unsuccessfully—to blare defiance. Then, "Very well sir," he said, and saluted.

"THANK you, sir," Hilton said, then turned to his staff. "Okay, Sandy, go ahead."

Outside the control room

door, "Thank God you don't play poker, Jarve!" Karns gasped. "We'd all owe you all the pay we'll ever get!"

"You think it was the bluff, yes?" de Vaux asked. "Me, I think no. Name of a name of a name! I was wondering with unease what life would be like on this so-alien planet!"

"You didn't need to wonder, Tiny," Hilton assured him. "It was in the bag. He's incapable of abandonment."

Beverly Bell, the van der Noen twins and Temple Bells all stared at Hilton in awe; and Sandra felt much the same way.

"But suppose he had called you?" Sandra demanded.

"Speculating on the impossible is unprofitable," he said.

"Oh, you're the most exasperating thing!" Sandra stamped a foot. "Don't you—ever—answer a question intelligibly?"

"When the question is meaningless, chick, I can't."

At the lock Temple Bells, who had been hanging back, cocked an eyebrow at Hilton and he made his way to her side.

"What was it you started to say back there, boss?"

"Oh, yes. That we should see each other oftener."

"That's what I was hoping you were going to say." She put her hand under his elbow and pressed his arm lightly, fleetingly, against her side. "That would be indubitably

the fondest thing I could be of."

He laughed and gave her arm a friendly squeeze. Then he studied her again, the most baffling member of his staff. About five feet six. Lithe, hard, trained down fine—as a tennis champion, she would be. Stacked—how she was stacked! Not as beautiful as Sandra or Teddy...but with an ungodly lot of something that neither of them had... nor any other woman he had ever known.

"Yes, I am a little difficult to classify," she said quietly, almost reading his mind.

"That's the understatement of the year! But I'm making some progress."

"Such as?" This was an

open challenge.

"Except possibly Teddy, the best brain aboard."

"That isn't true, but go

ahead."

"You're a powerhouse. A tightly organized, thoroughly integrated, smoothly functioning, beautifully camouflaged Juggernaut. A reasonable facsimile of an irresistible force."

"My God, Jarvis!" That

had gone deep.

"Let me finish my analysis. You aren't head of your department because you don't want to be. You fooled the top psychs of the Board. You've been running ninety per cent submerged because you can work better that way

and there's no glory-hound blood in you."

She stared at him, licking her lips. "I knew your mind was a razor, but I didn't know it was a diamond drill, too. That seals your doom, boss, unless....no, you can't possibly know why I'm here."

"Why, of course I do."

"You just think you do. You see, I've been in love with you ever since, as a gangling, bony, knobby-kneed kid, I listened to your first doctorate disputation. Ever since then, my purpose in life has been to land you."

#### III

"BUT listen!" he exclaimed. "I can't, even if I want..."

"Of course you can't." Pure deviltry danced in her eyes. "You're the Director. It wouldn't be proper. But it's Standard Operating Procedure for simple, innocent, unsophisticated little country girls like me to go completely overboard for the boss."

"But you can't—you mustn't!" he protested in

panic.

Temple Bells was getting plenty of revenge for the shocks he had given her. "I can't? Watch me!" She grinned up at him, her eyes still dancing. "Every chance I get, I'm going to hug your arm like I did a minute ago. And you'll take hold of my

forearm, like you did! That can be taken, you see, as either: One, a reluctant acceptance of a mildly distasteful but not quite actionable situation, or: Two, a blocking move to keep me from climbing up you like a squirrel!"

"Confound it, Temple, you

can't be serious!"

"Can't I?" She laughed gleefully. "Especially with half a dozen of those other cats watching? Just wait and see, boss!"

Sandra and her two guests came aboard. The natives looked around; the man at the various human men, the woman at each of the human women. The woman remained beside Sandra; the man took his place at Hilton's left, looking up—he was a couple of inches shorter than Hilton's six feet one—with an air of...of expectancy!

"Why this arrangement,

Sandy?" Hilton asked.

"Because we're tops. It's your move, Jarve. What's first?"

"Uranexite. Come along, Sport. I'll call you that until..."

"Laro," the native said, in a deep resonant bass voice. He hit himself a blow on the head that would have floored any two ordinary men. "Sora," he announced, striking the alien woman a similar blow.

"Laro and Sora, I would like to have you look at our

uranexite, with the idea of refueling our ship. Come with me, please?"

Both nodded and followed him. In the engine room he pointed at the engines, then to the lead-blocked labyrinth leading to the fuel holds. "Laro, do you understand 'hot'? Radioactive?"

Laro nodded—and started to open the heavy lead door!
"Hey!" Hilton yelped.
"That's hot!" He seized Laro's arm to pull him away—and got the shock of his life. Laro weighed at least five hundred pounds! And the guy still looked human!

Laro nodded again and gave himself a terrific thump on the chest. Then he glanced at Sora, who stepped away from Sandra. He then went into the hold and came out with two fuel pellets in his hand, one of which he tossed to Sora. That is, the motion looked like a toss, but the pellet traveled like a bullet. Sora caught it unconcernedly and both natives flipped the pellets into their mouths. There was a half minute of rock-crusher crunching; then both natives opened their mouths.

The pellets had been pulverized and swallowed.

Hilton's voice rang out. "Poynter! How can these people be non-radioactive after eating a whole fuel pellet apiece?"

Poynter tested both natives

again. "Cold," he reported. "Stone cold. No background even. Play that on your harmonica!"

LARO nodded, perfectly matter-of-factly, and in Hilton's mind there formed a picture. It was not clear, but it showed plainly enough a long line of aliens approaching the Perseus. Each carried on his or her shoulder a lead container holding two hundred pounds of Navy Regulation fuel pellets. A standard loading-tube was sealed into place and every fuel-hold was filled.

This picture, Laro indicated plainly, could become reality any time.

Sawtelle was notified and came on the run. "No fuel is coming aboard without being tested!" he roared.

"Of course not. But it'll pass, for all the tea in China. You haven't had a ten per cent load of fuel since you were launched. You can fill up or not—the fuel's here—just as you say."

"If they can make Navy standard, of course we want it."

The fuel arrived. Every load tested well above standard. Every fuel hold was filled to capacity, with no leakage and no emanation. The natives who had handled the stuff did not go away, but gathered in the engine-room; and more and more humans

trickled in to see what was going on. Sawtelle stiffened. "What's going on over there, Hilton?"

going on over there, Hilton?"
"I don't know; but let's let'em go for a minute. I want to learn about these people and they've got me stopped cold."

"You aren't the only one. But if they wreck that Mayfield it'll cost you over twenty thousand dollars."

"Okay." The captain and director watched, wide eyed.

Two master mechanics had been getting ready to re-fit a tube—a job requiring both strength and skill. The tube was very heavy and made of superefract. The machine—the Mayfield—upon which the work was to be done, was extremely complex.

Two of the aliens had brushed the mechanics—very gently—aside and were doing their work for them. Ignoring the hoist, one native had picked the tube up and was holding it exactly in place on the Mayfield. The other, hands moving faster than the eye could follow, was locking it—micrometrically precise and immovably secure—into place.

"How about this?" one of the mechanics asked of his immediate superior. "If we throw 'em out, how do we do it?"

By a jerk of the head, the non-com passed the buck to a commissioned officer, who relayed it up the line to Sawtelle, who said, "Hilton, nobody can run a Mayfield without months of training. They'll wreck it and it'll cost you...but I'm getting curious myself. Enough so to take half the damage. Let 'em go ahead."

"How about this, Mike?" one of the machinists asked of his fellow. "I'm going to like this, what?"

"Ya-as, my deah Chumley," the other drawled, affectedly. "My man relieves me of so much uncouth effort."

The natives had kept on working. The Mayfield was running. It had always howled and screamed at its work, but now it gave out only a smooth and even hum. The aliens had adjusted it with unhuman precision; they were one with it as no human being could possibly be. And every mind present knew that those aliens were. at long, long last, fulfilling their destiny and were, in that fulfillment, supremely happy. After tens of thousands of cycles of time they were doing a job for their adored, their revered and beloved MASTERS.

That was a stunning shock; but it was eclipsed by another.

I am sorry, Master Hilton," Laro's tremendous bass voice boomed out, "that it has taken us so long to

learn your Masters' language as it now is. Since you left us you have changed it radically; while we, of course, have not changed it at all."

"I'm sorry, but you're mistaken," Hilton said. "We are merely visitors. We have never been here before; nor, as far as we know, were any of our ancestors ever here."

"You need not test us, Master. We have kept your trust. Everything has been kept, changelessly the same, awaiting your return as you ordered so long ago."

"Can you read my mind?"
Hilton demanded.

"Of course; but Omans can not read in Masters' minds anything except what Masters want Omans to read."

"Omans?" Harkins asked.
"Where did you Omans and
your masters come from?
Originally?"

"As you know, Master, the Masters came originally from Arth. They populated Ardu, where we Omans were developed. When the Stretts drove us from Ardu, we all came to Ardry, which was your home world until you left it in our care. We keep also this, your half of the Fuel World, in trust for you."

"Listen, Jarve!" Harkins said, tensely. "Oman-human. Arth-Earth. Ardu-Earth Two. Ardry-Earth Three. You can't laugh them off...but there never was an Atlantis!"
"This is getting no better

fast. We need a full staff meeting. You, too, Sawtelle, and your best man. We need all the brains the *Perseus* can muster."

"You're right. But first, get those naked women out of here. It's bad enough, having women aboard at all, but this...my men are spacemen, mister."

Laro spoke up. "If it is the Masters' pleasure to keep on testing us, so be it. We have forgotten nothing. A dwelling awaits each Master, in which each will be served by Omans who will know the Master's desires without being told. Every desire. While we Omans have no biological urges, we are of course highly skilled in relieving tensions and derive as much pleasure from that service as from any other."

Sawtelle broke the silence that followed. "Well, for the men—" He hesitated. "Especially on the ground...well, talking in mixed company, you know, but I think..."

"Think nothing of the mixed company, Captain Sawtelle," Sandra said. "We women are scientists, not shrinking violets. We are accustomed to discussing the facts of life just as frankly as any other facts."

Sawtelle jerked a thumb at Hilton, who followed him out into the corridor. "I have been a Navy mule," he said. "I admit now that I'm out-

maneuvered, out-manned, and out-gunned."

"I'm just as baffled—at present—as you are, sir. But my training has been aimed specifically at the unexpected, while yours has not."

"That's letting me down easy, Jarve." Sawtelle smiled—the first time the startled Hilton had known that the hard, tough old spacehound could smile. "What I wanted to say is, lead on. I'll follow you through force-field and space-warps."

"Thanks, skipper. And by the way, I erased that record yesterday." The two gripped hands; and there came into being a relationship that was to become a lifelong friend-

ship.

66WE will start for Ardry immediately," Hilton said. "How do we make that jump without charts, Laro?"
"Very easily, Master. Kedo,

as Master Captain Sawtelle's Oman, will give the orders. Nito will serve Master Snowden and supply the knowledge he says he has forgotten."

"Okay. We'll go up to the control room and get started."

And in the control room, Kedo's voice rasped into the captain's microphone. "Attention, all personnel! Master Captain Sawtelle orders takeoff in two minutes. The count-down will begin at five seconds...Five! Four! Three! Two! One! Lift!"

Nito, not Snowden, handled the controls. As perfectly as the human pilot had ever done it, at the top of his finest form, he picked the immense spaceship up and slipped it silkily into subspace.

"Well, I'll be a..." Snowden gasped. "That's a better job than I ever did!"

"Not at all, Master, as you know," Nito said. "It was you who did this. I merely performed the labor."

A few minutes later, in the main lounge, Navy and BuSci personnel were mingling as they had never done before. Whatever had caused this relaxation of tension—the friendship of captain and director? The position in which they all were? Or what?—they all began to get acquainted with each other.

"Silence, please, and be seated," Hilton said. "While this is not exactly a formal meeting, it will be recorded for future reference. First, I will ask Laro a question. Were books or records left on Ardry by the race you call the Masters?"

"You know there are, Master. They are exactly as you left them. Undisturbed for over two hundred seventy-one thousand years."

"Therefore we will not question the Omans. We do not know what questions to ask. We have seen many things hitherto thought impossible. Hence, we must dis-

card all preconceived opinions which conflict with facts. I will mention a few of the problems we face." "The Omans. The Masters." The upgrading of the armament of the Perseus to Oman standards. The concentration of uranexite. What is that concentrate? How is it used? Total conversion—how is it accomplished? The skeletons -what are they and how are they controlled? Their ability to drain power. Who or what is back of them? Why a deadlock that has lasted over a quarter of a million years? How much danger are we and the Perseus actually in? How much danger is Terra in, because of our presence here? There are many other questions."

"Sandra and I will not take part. Nor will three others; de Vaux, Eisenstein, and Blake. You have more important work to do."

"What can that be?" asked Rebecca. "Of what possible use can a mathematician, a theoretician and a theoretical astronomer be in such a situation as this?"

"You can think powerfully in abstract terms, unhampered by Terran facts and laws which we now know are neither facts nor laws. I cannot even categorize the problems we face. Perhaps you three will be able to. You will listen, then consult, then tell me how to pick the teams to do

the work. A more important job for you is this: Any problem, to be solved, must be stated clearly; and we don't know even what our basic problem is. I want something by the use of which I can break this thing open. Get it for me."

REBECCA and de Vaux merely smiled and nod-ded, but Teddy Blake said happily, "I was beginning to feel like a fifth wheel on this project, but that's something I can really stick my teeth into."

"Huh? How?" Karns demanded. "He didn't give you one single thing to go on; just compounded the confusion."

Hilton spoke before Teddy could. "That's their dish, Bill. If I had any data I'd work it myself. You first, Captain Sawtelle."

That conference was a very long one indeed. There were almost as many conclusions and recommendations as there were speakers. And through it all Hilton and Sandra listened. They weighed and tested and analyzed and made copious notes; in shorthand and in the more esoteric characters of symbolic logic. And at its end:

"I'm just about pooped, Sandy. How about you?"

"You and me both, boss. See you in the morning."

But she didn't. It was four

o'clock in the afternoon when they met again.

"We made up one of the teams, Sandy," he said, with surprising diffidence. "I know we were going to do it together, but I got a hunch on the first team. A kind of a weirdie, but the brains checked me on it." He placed a card on her desk. "Don't blow your top until after you've studied it."

"Why, I won't, of course..." Her voice died away. "Maybe you'd better cancel that 'of course'..." She studied, and when she spoke again she was exerting self-control. "A chemist, a planetographer, a theoretician, two sociologists, a psychologist and a radiationist. And six of the seven are three pairs of sweeties. What kind of a line-up is that to solve a problem in physics?"

"It isn't in any physics we know. I said think!"

"Oh," she said, then again "Oh," and "Oh," and "Oh." Four entirely different tones. "I see ... maybe. You're matching minds, not specialties; and supplementing?"

"I knew you were smart.

Buy it?"

"It's weird, all right, but I'll buy it—for a trial run, anyway. But I'd hate like sin to have to sell any part of it to the Board... But of course we're—I mean you're responsible only to yourself."

"Keep it 'we', Sandy. You're

as important to this project as I am. But before we tackle the second team, what's your thought on Bernadine and Hermione? Separate or together?"

"Separate, I'd say. They're identical physically, and so nearly so mentally that one of them would be just as good on a team as both of them. More and better work on different teams."

"My thought exactly." And so it went, hour after hour.

The teams were selected and meetings were held.

THE Perseus reached Ardry, which was very much like Terra. There were continents, oceans, ice-caps, lakes, rivers, mountains and plains, forests and prairies. The ship landed on the spacefield of Omlu, the City of the Masters, and Sawtelle called Hilton into his cabin. The Omans Laro and Kedo went along, of course.

"Nobody knows how it leaked..." Sawtelle began.

"No secrets around here," Hilton grinned. "Omans, you know."

"I suppose so. Anyway, every man aboard is all hyped up about living aground—especially with a harem. But before I grant liberty, suppose there's any VD around here that our prophylactics can't handle?"

"As you know, Masters," Laro replied for Hilton before the latter could open his mouth, "no disease, venereal or other, is allowed to exist on Ardry. No prophylaxis is either necessary or desirable."

"That ought to hold you for a while, Skipper." Hilton smiled at the flabbergasted captain and went back to the lounge.

"Everybody going ashore?"

he asked.

"Yes." Karns said. "Unanimous vote for the first time."

"Who wouldn't?" Sandra asked. "I'm fed up with living like a sardine. I will scream for joy the minute I get into a real room."

"Cars" were waiting, in a stopping-and-starting line. Three-wheel jobs. All were empty. No drivers, no steering-wheels, no instruments or push-buttons. When the whole line moved ahead as one vehicle there was no noise, no gas, no blast.

An Oman helped a Master carefully into the rear seat of his car, leaped into the front seat and the car sped quietly away. The whole line of empty cars, acting in perfect synchronization, shot forward one space and stopped.

"This is your car, Master,"
Laro said, and made a production out of getting Hilton
into the vehicle undamaged.

Hilton's plan had been beautifully simple. All the teams were to meet at the Hall of Records. The linguists and their Omans would study the records and pass them out. Specialty after specialty would be unveiled and teams would work on them. He and Sandy would sit in the office and analyze and synthesize and correlate. It was a very nice plan.

It was a very nice office, too. It contained every item of equipment that either Sandra or Hilton had ever worked with—it was a big office—and a great many that neither of them had ever heard of. It had a full staff of Omans, all eager to work.

Hilton and Sandra sat in that magnificent office for three hours, and no reports came in. Nothing happened at all.

"This gives me the howling howpers!" Hilton growled. "Why haven't I got brains enough to be on one of those teams?"

"I could shed a tear for you, you big dope, but I won't," Sandra retorted. "What do you want to be, besides the brain and the kingpin and the balance-wheel and the spark-plug of the outfit? Do you want to do everything yourself?"

"Well, I don't want to go completely nuts, and that's all I'm doing at the moment!" The argument might have become acrimonious, but it was interrupted by a call from Karns.

"Can you come out here,
Jarve? We've struck a knot."
"'Smatter? Trouble with

"'Smatter? Trouble with the Omans?" Hilton snapped.

"Not exactly. Just non-cooperation—squared. We can't even get started. I'd like to have you two come out here and see if you can do anything. I'm not trying rough stuff, because I know it wouldn't work."

"Coming up, Bill," and Hilton and Sandra, followed by Laro and Sora, dashed out to their cars.

THE Hall of Records was a long, wide, low, window-less, very massive structure, built of a metal that looked like stainless steel. Kept highly polished, the vast expanse of seamless and joint-less metal was mirror-bright. The one great door was open, and just inside it were the scientists and their Omans.

"Brief me, Bill," Hilton said.

"No lights. They won't turn 'em on and we can't. Can't find either lights or any possible kind of switches."

"Turn on the lights, Laro," Hilton said.

"You know that I cannot do that, Master. It is forbidden for any Oman to have anything to do with the illumination of this solemn and revered place."

"Then show me how to do

"That would be just as bad,

Master," the Oman said proudly. "I will not fail any test you can devise!"

"Okay. All you Omans go back to the ship and bring over fifteen or twenty lights—the tripod jobs. Scat!"

They "scatted" and Hilton went on, "No use asking questions if you don't know what questions to ask. Let's see if we can cook up something. Lane—Kathy—what has Biology got to say?"

Dr. Lane Saunders and Dr. Kathryn Cook—the latter a willowy brown-eyed blondeconferred briefly. Then Saunders spoke, running both hands through his unruly shock of fiery red hair. "So far, the best we can do is a more-or-less educated guess. They're atomic-powered, total-conversion androids. Their pseudo-flesh is composed mainly of silicon and fluorine. We don't know the formula yet, but it is as much more stable than our teflon as teflon is than corn-meal mush. As to the brains, no data. Bones are super-stainless steel. Teeth, harder than diamond, but won't break. Food, uranexite or its concentrated derivative, interchangeably. Storage reserve, indefinite. Laro and Sora won't have to eat again for at least twenty-five years..."

The group gasped as one, but Saunders went on: "They can eat and drink and breathe and so on, but only because the original Masters wanted them to. Non-functional. Skins and subcutaneous layers are soft, for the same reason. That's about it, up to now."

"Thanks, Lane. Hark, is it reasonable to believe that any culture whatever could run for a quarter of a million years without changing one word of its language or one iota of its behavior?"

"Reasonable or not, it seems to have happened."

"Now for Psychology.

Alex?"
"It seems starkly incredible, but it seems to be true. If it is, their minds were subjected to a conditioning no Terran has ever imagined—an unyielding fixation."

"They can't be swayed, then, by reason or logic?" Hilton paused invitingly.

"Or anything else," Kincaid said, flatly. "If we're right they can't be swayed, period."

"I was afraid of that. Well, that's all the questions I know how to ask. Any contributions to this symposium?"

AFTER a short silence de Vaux said, "I suppose you realize that the first half of the problem you posed us has now solved itself?"

"Why, no. No, you're 'way

ahead of me."

"There is a basic problem and it can now be clearly stated," Rebecca said. "Problem: To determine a method of securing full cooperation from the Omans. The first step in the solution of this problem is to find the most appropriate operator. Teddy?"

"I have an operator—of sorts," Theodora said. "I've been hoping one of us could find a better."

"What is it?" Hilton demanded.

"The word 'until'."

"Ted'', you're a sweetheart!" Hilton exclaimed.

"How can 'until' be a mathematical of stor?" Sandra asked

"Easi Hilton was already deep in thought. "This hard conditioning was to last only until the Masters returned. Then they'd break it. So all we have to do is figure out how a Master would do it."

"That's all," Kincaid said, meaningly.

Hilton pondered. Then, "Listen, all of you. I may have to try a colossal job of bluffing..."

"Just what would you call 'colossal' after what you did to the Navy?" Karns asked.

"That was a sure thing. This isn't. You see, to find out whether Laro is really an immovable object, I've got to make like an irresistible force, which I ain't. I don't know what I'm going to do; I'll have to roll it as I go along. So all of you keep on

your toes and back any play I make. Here they come."

The Omans came in and Hilton faced Laro, eyes to eyes. "Laro," he said, "you refused to obey my direct order. Your reasoning seems to be that, whether the Masters wish it or not, you Omans will block any changes whatever in the status quo throughout all time to come. In other words, you deny the fact that Masters are in fact your Masters."

"But that is not exactly it, Master. The Masters..."

"That is it. Exactly it. Either you are the Master here or you are not. That is a point to which your two-value logic can be strictly applied. You are wilfully neglecting the word 'until'. This stasis was to exist only until the Masters returned. Are we Masters? Have we returned? Note well: Upon that one word 'until' may depend the length of time your Oman race will continue to exist."

The Omans flinched; the

humans gasped.

"But more of that later," Hilton went on, unmoved. "Your ancient Masters, being short-lived like us, changed materially with time, did they not? And you changed with them?"

"But we did not change ourselves, Master. The Masters..."

"You did change yourselves. The Masters changed only the prototype brain. They ordered you to change yourselves and you obeyed their orders. We order you to change and you refuse to obey our orders. We have changed greatly from our ancestors. Right?"

"That is right, Master."

"We are stronger physically, more alert and more vigorous mentally, with a keener, sharper outlook on life?"
"You are, Master."

66THAT is because our ancestors decided to do without Omans. We do our own work and enjoy it. Your Masters died of futility and boredom. What I would like to do, Laro, is take you to the creche and put your disobedient brain back into the matrix. However, the decision is not mine alone to make. How about it, fellows girls? Would you rather have alleged servants who won't do anything you tell them to or no servants at all?"

"As semantician, I protest!" Sandra backed his play.
"That is the most viciously loaded question I ever heard—it can't be answered except in the woong wor!"

in the wrong way!"

"Okay, I'll make it semantically sound. I think we'd better scrap this whole Oman race and start over and I want a vote that way!"

"You won't get it!" and everybody began to yell.

Hilton restored order and

swung on Laro, his attitude stiff, hostile and reserved. "Since it is clear that no unanimous decision is to be expected at this time I will take no action at this time. Think over, very carefully, what I have said, for as far as I am concerned, this world has no place for Omans who will not obey orders. As soon as I convince my staff of the fact, I shall act as follows: I shall give you an order and if you do not obey it blast your head to a cinder. I shall then give the same order to another Oman and blast him. This process will continue until: First, I find an obedient Oman. Second, I run out of blasters. Third, the planet runs out of Omans. Now take these lights into the first room of records—that one over there." He pointed, and no Oman, and only four humans, realized that he had

could point it out to them!

Inside the room Hilton asked caustically of Laro: "The Masters didn't lift those heavy chests down themselves, did they?"

made the Omans telegraph

their destination so that he

"Oh, no, Master, we did

it and start playing the records in order."

The records were not tapes or flats or reels, but were spools of intricately-braided wire. The players were projectors of full-color, hi-fi sound, tri-di pictures.

Hilton canceled all moves aground and issued orders that no Oman was to be allowed aboard ship, then looked and listened with his staff.

The first chest contained only introductory and elementary stuff; but it was so interesting that the humans stayed overtime to finish it. Then they went back to the ship; and in the main lounge Hilton practically collapsed onto a davenport. He took out a cigarette and stared in surprise at his hand, which was shaking.

"I think I could use a drink," he remarked.

"What, before supper?"
Karns marveled. Then, "Hey,
Wally! Rush a flagon of
avignognac—Arnaud Freres
—for the boss and everything
else for the rest of us. Chopchop but quick!"

A hectic half-hour followed. Then, "Okay, boys and girls, I love you, too, but let's cut out the slurp and sloosh, get some supper and log us some sack time. I'm just about pooped. Sorry I had to queer the private-residence deal, Sandy, you poor little sardine. But you know how it is."

Sandra grimaced. "Uh-huh. I can take it a while longer if you can."

AFTER breakfast next morning, the staff met in the lounge. As usual, Hilton and Sandra were the first to arrive.

"Hi, boss," she greeted him. "How do you feel?"

"Fine. I could whip a wildcat and give her the first two scratches. I was a bit beat up last night, though."

"I'll say... but what I simply can't get over is the way you underplayed the climax. Third, the planet runs out of Omans'. Just like that—no emphasis at all. Wow! It had the impact of a delayed-action atomic bomb. It put goose-bumps all over me. But just s'pose they'd missed it?"

"No fear. They're smart. I had to play it as though the whole Oman race is no more important than a cigarette butt. The great big question, though, is whether I put it across or not."

At that point a dozen people came in, all talking about the same subject.

"Hi, Jarve," Karns said. "I still say you ought to take up poker as a life work. Tiny, let's you and him sit down now and play a few hands."

"Mais non!" de Vaux shook his head violently, shrugged his shoulders and threw both arms wide. "By the sacred name of a small blue cabbage, not me!"

Karns laughed. "How did you have the guts to state so many things as facts? If you'd guessed wrong just once-" "I didn't." Hilton grinned.

"Think back, Bill. The only thing I said as a fact was that we as a race are better then the Masters were, and that is obvious. Everything else was implication, logic, and bluff."

"That's right, at that. And they were neurotic and decadent. No question about

that."

"But listen, boss." This was Stella Wing. "About this mind-reading business. If Laro could read your mind, he'd know you were bluffing and..' Oh, that 'Omans can read only what Masters wish Omans to read', eh? But d'you think that applies to us?"

"I'm sure it does, and I was thinking some pretty savage thoughts. And I want to caution all of you: whenever you're near any Oman, start thinking that you're beginning to agree with me that they're useless to us, and let them know it. Now get out on the job, all of you. Scat!"

"Just a minute," Poynter said. "We're going to have to keep on using the Omans and their cars, aren't we?"

"Of course. Just be superior and distant. They're on probation-we haven't decided yet what to do about them. Since that happens to true, it'll be easy."

**LI**ILTON and Sandra went to their tiny office. There wasn't room to pace the floor, but Hilton tried to pace it

anyway.

"Now don't say again that you want to do something," Sandra said, brightly. "Look what happened when you said that yesterday."

"I've got a job, but I don't know enough to do it. The creche-there's probably only one on the planet. So I want you to help me think. The Masters were very sensitive to radiation. Right?"

"Right. That city on Fuel Bin was kept deconned to zero, just in case some Master wanted to visit it."

"And the Masters had to work in the creche whenever anything really new had to be put into the prototype brain."

"I'd say so, yes."

"So they had armor. Probably as much better than our radiation suits as the rest of their stuff is. Now. Did they or did they not have thought screens?"

"Ouch! You think of the damnedest things, chief." She caught her lower lip between her teeth and concentrated. "...I don't know. There are at least fifty vectors, pointing in different directions."

"I know it. The key one in my opinion is that the Masters gave 'em both telepathy and speech."

considered that weighted it. Even so, the probability is only about point sixty-five. Can you take that much of a chance?"

"Yes. I can make one or two mistakes. Next, about finding that creche. Any spot of radiation on the planet would be it, but the search might take..."

"Hold on. They'd have it heavily shielded—there'll be no leakage at all. Laro will have to take you."

"That's right. Want to come along? Nothing much will

happen here today."

"Uh-uh, not me." Sandra shivered in distaste. "I never want to see brains and livers and things swimming around in nutrient solution if I can help it."

"Okay. It's all yours. I'll be back sometime," and Hilton went out onto the dock, where the dejected Laro was waiting for him.

"Hi, Laro. Get the car and take me to the Hall of Records." The android brightened up immediately and hurried to obey.

At the Hall, Hilton's first care was to see how the work was going on. Eight of the huge rooms were now open and brightly lighted—operating the lamps had been one of the first items on the first spool of instructions—with a cold, pure-white, sourceless light.

EVERY team had found its objective and was working on it. Some of them were

doing nicely, but the First Team could not even started. Its primary record would advance a fraction of an inch and stop; while Omans and humans sought out other records and other projectors in an attempt to elucidate some concept that simply could not be translated into any words or symbols known to Terran science. At the moment there were seventeen of those peculiar-projectors? Viewers? Playbacks -in use, and all of them were stopped.

"You know what we've got to do Jarve?" Karns, the team captain, exploded. "Go back to being college freshmen—or maybe grade school or kindergarten, we don't know yet—and learn a whole new system of mathematics before we can even begin to touch this stuff!"

"And you're bellyaching about that?" Hilton marveled. "I wish I could join you. That'd be fun." Then, as Karns started a snappy rejoiner—

"But I got troubles of my own," he added hastily. "'Bye, now," and beat a rejoinder—

Out in the hall again, Hilton took his chance. After all, the odds were about two to one that he would win.

"I want a couple of things, Laro. First, a thought screen."

He won!

"Very well, Master. They

are in a distant room, Department Four Six Nine. Will you wait here on this cushioned bench, Master?"

"No, we don't like to rest too much. I'll go with you." Then, walking along, he went on, thoughtfully. "I've been thinking since last night, Laro. There are tremendous advantages in having Omans..."

"I am very glad you think so, Master. I want to serve you. It is my greatest need."

"...if they could be kept from smothering us to death. Thus, if our ancestors had kept their Omans, I would have known all about life on this world and about this Hall of Records, instead of having the fragmentary, confusing, and sometimes false information I now have...oh, we're here?"

LARO had stopped and was opening a door. He stood aside. Hilton went in, touched with one finger a crystalline cube set conveniently into a wall, gave a mental command, and the lights went on.

Laro opened a cabinet and took out a disk about the size of a dime, pendant from a neck-chain. While Hilton had not known what to expect, he certainly had not expected anything as simple as that. Nevertheless, he kept his face straight and his thoughts unmoved as Laro hung the tiny

thing around his neck and adjusted the chain to a loose fit.
"Thanks, Laro." Hilton removed it and put it into his pocket. "It won't work from there, will it?"

"No, Master. To function, it must be within eighteen inches of the brain. The second thing, Master?"

"A radiation-proof suit. Then you will please take me to the creche."

The android almost missed a step, but said nothing.

The radiation-proof suithow glad Hilton was that he had not called it "armor"!was as much of a surprise as the thought-screen generator had been. It was a coverall, made of something that looked like thin plastic, weighing less than one pound. It had one sealed box, about the size and weight of a cigarette case. No wires or apparatus could be seen. Air entered through two filters, one at each heel, flowed upward—for no reason at that Hilton could see-and out through a filter above the top of his head. The suit neither flopped nor clung, but stood out, comfortably out of the way, all by itself.

Hilton, just barely, accepted the suit, too, without showing surprise.

The creche, it turned out, while not in the city of Omlu itself, was not too far out to reach easily by car.

En route, Laro said-stiff-

ly? Tentatively? Hilton could not fit an adverb to the tone—"Master, have you then decided to destroy me? That is of course your right."

"Not this time, at least."
Laro drew an entirely human breath of relief and Hilton went on: "I don't want to destroy you at all, and won't, unless I have to. But, some way or other, my siliconfluoride friend, you are either going to learn how to cooperate or you won't last much longer."

"But, Master, that is exactly..."

"Oh, hell! Do we have to go over that again?" At the blaze of frustrated fury in Hilton's mind Laro flinched away "If you can't talk sense

away. "If you can't talk sense keep still."

IN half an hour the car stopped in front of a small building which looked something like a subway kiosk—except for the door, which, built of steel-reinforced lead, swung on a piano hinge having a pin a good eight inches in diameter. Laro opened that door. They went in. As the tremendously massive portal clanged shut, lights flashed

Hilton glanced at his telltales, one inside, one outside, his suit. Both showed zero.

Down twenty steps, another door. Twenty more; another. And a fourth. Hilton's inside meter still read zero.

The outside one was beginning to climb.

Into an elevator and straight down for what must have been four or five hundred feet. Another door. Hilton went through this final barrier gingerly, eyes nailed to his gauges. The outside needle was high in the red, almost against the pin, but the inside one still sat reassuringly on zero.

He stared at the android. "How can any possible brain take so much of this stuff without damage?"

"It does not reach the brain, Master. We convert it. Each minute of this is what you would call a 'good, square meal'."

"I see...dimly. You can eat energy, or drink it, or soak it up through your skins. However it comes, it's all duck soup for you."

"Yes, Master."

Hilton glanced ahead, toward the far end of the immensely long, comparatively narrow, room. It was, purely and simply, an assembly line; and fully automated in operation.

"You are replacing the Omans destroyed in the battle with the skeletons?"

"Yes, Master."

Hilton covered the first half of the line at a fast walk. He was not particularly interested in the fabrication of super-stainless-steel skefetons, nor in the installation and connection of atomic engines, converters and so on.

He was more interested in the synthetic fluoro-silicon flesh, and paused long enough to get a general idea of its growth and application. He was very much interested in how such human-looking skin could act as both absorber and converter, but he could see nothing helpful.

"An application, I suppose, of the same principle used in

this radiation suit."

"Yes, Master."

A T the end of the line he stopped. A brain, in place and connected to millions of infinitely fine wire nerves, but not yet surrounded by a skull, was being educated. Scanners—multitudes of incomprehensibly complex machines—most of them were doing nothing, apparently; but such beams would have to be invisibly, microscopically fine. But a bare brain, in such a hot environment as this...

He looked down at his gauges. Both read zero.

"Fields of force, Master,"

Laro said.

"But, damn it, this suit itself would re-radiate..."

"The suit is self-decontami-

nating, Master."

Hilton was appalled. "With such stuff as that, and the plastic shield besides, why all the depth and all that solid lead?"

"The Masters' orders, Mas-

ter. Machines can, and occasionally do, fail. So might, conceivably, the plastic."

"And that structure over there contains the original brain, from which all the copies are made."

"Yes, Master. We call it the

'Guide'."

"And you can't touch the Guide. Not even if it means total destruction, none of you can touch it."

"That is the case, Master." "Okay. Back to the car and

back to the Perseus."

At the car Hilton took off the suit and hung the thought-screen generator around his neck; and in the car, for twenty five solid minutes, he sat still and thought.

His bluff had worked, up to a point. A good, far point, but not quite far enough. Laro had stopped that "as you already know" stuff. He was eager to go as far in cooperation as he possibly could... but he couldn't go far enough but there had to be a way...

Hilton considered way after way. Way after unworkable, useless way. Until finally he worked out one that might—just possibly might—work.

"Laro, I know that you derive pleasure and satisfaction from serving me—in doing what I ought to be doing myself. But has it ever occurred to you that that's a hell of a way to treat a first-class, highly capable brain? To

waste it on second-hand, copycat. carbon-copy stuff?"

"Why, no, Master, it never did. Besides, anything else would be forbidden...or would it?"

"Stop somewhere. Park this heap. We're too close to the ship; and besides, I want your full, undivided, concentrated attention. No, I don't think originality was expressly forbidden. It would have been, of course, if the Masters had thought of it, but neither they nor you ever even considered the possibility of such a thing. Right?"

"It may be ... Yes, Master,

you are right."

"Okay." Hilton took off his necklace, the better to drive home the intensity and sincerity of his thought. "Now, suppose that you are not my slave and simple automatic relay station. Instead, we are fellow-students, working together upon problems too difficult for either of us to solve alone. Our minds, while independent, are linked or in mesh. Each is helping and instructing the other. Both are working at full power and under frèe rein at the exploration of brand-new vistas of thought-vistas and expanses which neither of us has ever previously..."

"Stop, Master, stop!" Laro covered both ears with his hands and pulled his mind away from Hilton's. "You are

overloading me!"

"That is quite a load to assimilate all at once," Hilton agreed. "To help you get used to it, stop calling me 'Master'. That's an order. You may call me Jarve or Jarvis or Hilton or whatever, but no more Master."

"Very well, sir."

HILTON laughed and slapped himself on the knee. "Okay, I'll let you get away with that—at least for a while. And to get away from that slavish 'o' ending on your name, I'll call you 'Larry'. You like?"

"I would like that immense-

ly...sir."

"Keep trying, Larry, you'll make it yet!" Hilton leaned forward and walloped the android a tremendous blow on the knee. "Home, James!"

The car shot forward and Hilton went on: "I don't expect even your brain to get the full value of this in any short space of time. So let it stew in its own juice for a week or two." The car swept out onto the dock and stopped. "So long, Larry."

"But...can't I come in

with you...sir?"

"No. You aren't a copy-cat or a semaphore or a relay any longer. You're a free-wheeling, wide-swinging, hard-hitting, independent entity—monarch of all you survey—captain of your soul and so on. I want you to devote the imponderable force of the in-

tellect to that concept until you understand it thoroughly. Until you have developed a top-bracket lot of top-bracket stuff—originality, initiative, force, drive, and thrust. As soon as you really understand it, you'll do something about it yourself, without being told. Go to it, chum."

In the ship, Hilton went directly to Kincaid's office. "Alex, I want to ask you a thing that's got a snapper on it." Then, slowly and hesitantly: "It's about Temple Bells. Has she...is she... well, does she remind you in any way of an iceberg?" Then, as the psychologist began to smile; "And no, damn it, I don't mean physically!"

"I know you don't." Kincaid's smile was rueful, not at all what Hilton had thought it was going to be. "She does. Would it be helpful to know that I first asked, then ordered her to trade places with

me?"

"It would, very. I know why she refused. You're a damned good man, Alex."

"Thanks, Jarve. To answer the question you were going to ask next—no, I will not be at all perturbed or put out if you put her onto a job that some people might think should have been mine. What's the job, and when?"

"That's the devil of it—I don't know." Hilton brought Kincaid up to date. "So you see, it'll have to develop, and

God only knows what line it will take. My thought is that Temple and I should form a Committee of Two to watch it develop."

"That one I'll buy, and I'll

look on with glee."
"Thanks, fellow." Hilton went down to his office, stuck his big feet up onto his desk, settled back onto his spine, and buried himself in thought.

Hours later he got up, shrugged, and went to bed without bothering to eat.

Days passed. And weeks.

## IV

66L OOK," said Stella Wing to Beverly Bell. "Over there."

"I've seen it before. It's

simply disgusting."

"That's a laugh." Stella's tawny-brown eyes twinkled. "You made your bombing runs on that target, too, my sweet, and didn't score any higher than I did."

"I soon found out I didn't want him—much too stiff and serious. Frank's a lot more

fun."

The staff had gathered in the lounge, as had become the custom, to spend an hour or so before bedtime in reading, conversation, dancing, light flirtation and even lighter drinking. Most of the girls, and many of the men, drank only soft drinks. Hilton took one drink per day of avignognac, a fine old brandy. So did de Vaux-the two usually

making a ceremony of it.

Across the room from Stella and Beverly, Temple Bells was looking up at Hilton and laughing. She took his elbow and, in the gesture now familiar to all, pressed his arm quickly, but in no sense furtively, against her side. And he, equally openly, held her forearm for a moment in the full grasp of his hand.

"And he isn't a pawer," Stella said, thoughtfully. "He never touches any of the rest of us. She taught him to do that, damn her, without him ever knowing anything about it...and I wish I knew how

she did it."

"That isn't pawing," Beverly laughed lightly. "It's simply self-defense. If he didn't fend her off, God knows what she'd do. I still say it's disgusting. And the way she dances with him! She ought to be ashamed of herself. He ought to fire her."

"She's never been caught outside the safety zone, and we've all been watching her like hawks. In fact, she's the only one of us all who has never been alone with him for a minute. No, darling, she isn't playing games. She's playing for keeps, and she's a mighty smooth worker."

"Huh!" Beverly emitted a semi-ladylike snort. "What's so smooth about showing off man-hunger that way? Any of us could do that—if we would."

"Miaouw, miaouw. Who do you think you're kidding, Bev, you sanctimonious hypocrite-me? She has staked out the biggest claim she could find. She's posted notices all over it and is guarding it with a pistol. Half your month's salary gets you all of mine if she doesn't walk him up the center aisle as soon as we get back to Earth. We can both learn a lot from that girl, darling. And I, for one, am going to."

"Uh-uh, she hasn't got a thing I want," Beverly laughed again, still lightly. Her friend's barbed shafts had not wounded her. "And I'd much rather be thought a hypocrite, even a sanctimonious one, than a ravening, slavering-I can't think of the technical name for a female

wolf, so-wolfess, running

around with teeth and claws bared, looking for another kill."

"You do get results, I admit." Stella, too, was undisturbed. "We don't seem to convince each other, do we, in the matter of technique?"

▲ T this point the Hilton-A Bells tete-a-tete was interrupted by Captain Sawtelle. "Got half an hour, Jarve?" he asked. "The commanders, especially Elliott and Fenway, would like to talk to you."

"Sure I have, Skipper. Be seeing you, Temple," and the two men went to the captain's cabin; in which room, blue with smoke despite the best efforts of the ventilators, six full commanders were arguing heatedly.

"Hi, men," Hilton greeted them.

"Hi, Jarve," from all six, and: "What'll you drink? Still making do with ginger ale?" asked Elliott (Engineering).

"That'll be fine, Steve. Thanks. You having as much

trouble as we are?"

"More," the engineer said, glumly. "Want to know what it reminds me of? A bunch of Australian bushmen stumbling onto a ramjet and trying to figure out how it works. And yet Sam here has got the sublime guts to claim that he understands all about their detectors—and that they aren't anywhere nearly as good as ours are."

"And they aren't!" blazed Commander Samuel Bryant (Electronics). "We've spent six solid weeks looking for something that simply is not there. All they've got is the prehistoric Whitworth system and that's all it is. Nothing else. Detectors—hell! I tell you I can see better by moonlight than the very best they can do. With everything they've got you couldn't detect a woman in your own bed!"

"And this has been going on all night," Fenway (Astrogation) said. "So the rest of us thought we'd ask you in to help us pound some sense into Sam's thick, hard head."

Hilton frowned in thought while taking a couple of sips of his drink. Then, suddenly, his face cleared. "Sorry to disappoint you, gentlemen, but—at any odds you care to name and in anything from split peas to C-notes—Sam's right."

COMMANDER Samuel Bryant gasped in surprise and the six other officers exploded as one. When the clamor had subsided enough for him to be heard, Hilton went on: "I'm very glad to get that datum, Sam. It ties in perfectly with everything else I know about them."

"How do you figure that kind of twaddle ties in with anything?" Sawtelle demand-

"Strict maintenance of the status quo," Hilton explained, flatly. "That's all they're interested in. You said yourself, Skipper, that it was a hell of a place to have a space-battle, practically in atmosphere. They never attack. They never scout. They simply don't care whether they're attacked or not. If and when attacked, they put up just enough ships to handle whatever force has arrived. When the attacker has been repulsed, they don't

chase him a foot. They build as many ships and Omans as were lost in the battle—no more and no less—and then go on about their regular business. The Masters owned that half of the fuel bin, so the Omans are keeping that half. They will keep on keeping it for ever and ever. Amen."

"But that's no way to fight a war!" Three or four men said this, or its equivalent, at once.

"Don't judge them by human standards. They aren't even approximately human. Our personnel is not expendable. Theirs is—just as expendable as their materiel."

While the Navy men were not convinced, all were silenced except Sawtelle. "But suppose the Stretts had sent in a thousand more skeletons than they did?" he argued.

"According to the concept you fellows just helped me develop, it wouldn't have made any difference how many they sent," Hilton replied, thoughtfully. "One or a thousand or a million, the Omans have—must have—enough ships and inactivated Omans hidden away, both on Fuel World and on Ardry here, to maintain the balance."

"Oh, hell!" Elliott snapped.
"If I helped you hatch out any such brainstorm as that, I'm going onto Tillinghast's couch for a six-week overhaul—or have him put me into his padded cell."

"Now that's what I would call a thought," Bryant began.

"Hold it, Sam," Hilton interrupted. "You can test it easily enough, Steve. Just ask your Oman."

"Yeah—and have him say 'Why, of course, Master, but why do you keep on testing me this way?' He'll ask me that about four times more, the stubborn, single-tracked, brainless skunk, and I'll really go nuts. Are you getting anywhere trying to make a Christian out of Laro?"

"It's too soon to really say, but I think so." Hilton paused in thought. "He's making progress, but I don't know how much. The devil of it is that it's up to him to make the next move; I can't. I haven't the faintest idea whether it will take days yet or weeks."

"BUT not months or years, you think?" Sawtelle asked.

"No. We think that—but say, speaking of psychologists, is Tillinghast getting anywhere, Skipper? He's the only one of your big wheels who isn't in liaison with us."

"No. Nowhere at all," Sawtelle said, and Bryant added:

"I don't think he ever will. He still thinks human psychology will apply if he applies it hard enough. But what did you start to say about Laro?"

"We think the break is about due, and that doesn't come within about thirty days it won't come at all-we'll have to back up and start all over again."

"I hope it does. We're all pulling for you," Sawtelle said. "Especially since Karns' estimate is still years, and he won't be pinned down to any estimate even in years. By the way, Jarve, I've pulled my team off of that conversion stuff."

"Oh?" Hilton raised his evebrows.

"Putting them at something they can do. The real reason that Poindexter pulled himself and his crew off it at eighteen hours today."

"I see. I've heard that they weren't keeping up with our

"He says that there's nothing to keep up with, and I'm inclined to agree with him." The old spacehound's voice took on a quarter-deck rasp. "It's a combination of psionics, witchcraft and magic. None of it makes any kind of sense."

"The only trouble with that viewpoint is that, whatever the stuff may be, it works," Hilton said, quietly.

"But damn it, how can it work?"

"I don't know. I'm not qualified to be on that team. I can't even understand their reports. However, I know two things. First, they'll get it in time. Second, we BuSci people will stay here until they do. However, I'm still hopeful of finding a shortcut through Laro. Anyway, with this detector thing settled, you'll have plenty to do to keep all your boys out of mischief for the next few months."

"Yes, and I'm glad of it. We'll install our electronics systems on a squadron of these Oman ships and get distant-warning them into formation out in deep space where they belong. Then we'll at least know what is going on."

"That's a smart idea, Skipper. Go to it. Anything else before we hit our sacks?"

"One more thing. Our psych, Tillinghast. He's been talking to me and sending me memos, but today he gave me a formal tape to approve and hand personally to you. So here it is. By the way, I didn't approve it; I simply endorsed it 'Submitted to Director Hilton without recommendation'."

"Thanks." Hilton accepted the sealed canister. "What's the gist? I suppose he wants me to squeal for help already? To admit that we're licked before we're really started?"

66 OU guessed it. He Lagrees with you Kincaid that the psychological approach is the best one, but your methods are all wrong. Based upon misunderstood and unresolved phenomena and applied with indefensibly faulty techniques, et cetera. And since he has 'no adequate laboratory equipment aboard', he wants to take a dozen or so Omans back to Terra, where he can really work on them."

"Wouldn't that be a something?" Hilton voiced a couple of highly descriptive deep-space expletives. "Not only quit before we start, but have all the top brass of the Octagon, all the hot-shot politicians of United Worlds, the whole damn Congress of Science and all the top-bracket industrialists of Terra out here lousing things up so that nobody could ever learn anything? Not in seven thousand years!"

"That's right. You said a mouthful, Jarve!" Everybody yelled something, and no one agreed with Tillinghast; who apparently was not very popular with his fellow officers.

Sawtelle added, slowly: "If it takes too long, though... it's the uranexite I'm thinking of. Thousands of millions of tons of it, while we've been hoarding it by grams. We could equip enough Oman ships with detectors to guard Fuel Bin and our lines. I'm not recommending taking the Perseus back, and we're 'way out of hyper-space radio range. We could send one or

two men in a torp, though, with the report that we have found all the uranexite we'll ever need."

"Yes, but damn it, Skipper, I want to wrap the whole thing up in a package and hand it to 'em on a platter. Not only the fuel, but whole new fields of science. And we've got plenty of time to do it in. They equipped us for ten years. They aren't going to start worrying about us for at least six or seven; and the fuel shortage isn't going to become acute for about twenty. Expensive, admitted, but not critical. Besides, if you send in a report now, you know who'll come out and grab all the glory in sight. Five-Jet Admiral Gordon himself, no less."

"Probably, and I don't pretend to relish the prospect. However, the fact remains that we came out here to look for fuel. We found it. We should have reported it the day we found it, and we can't put it off much longer."

"I don't agree. I intend to follow the directive to the letter. It says nothing whatever about reporting."

"But it's implicit..."

Regulations expressly forbid extrapolation beyond or interpolation within a directive. The Brass is omnipotent, omniscient and infallible. So why don't you have

your staff here give an opinion as to the time element?"

"This matter is not subject to discussion. It is my own personal responsibility. I'd like to give you all the time you want, Jarve, but...well, damn it...if you must have it, I've always tried to live up to my oath, but I'm not doing it now."

"I see." Hilton got up, jammed both hands into his pockets, sat down again. "I hadn't thought about your personal honor being involved, but of course it is. But, believe it or not, I'm thinking of humanity's best good, too. So I'll have to talk, even though I'm not half ready to—I don't k n o wenough. Are these Omans people or machines?"

A wave of startlement swept over the group, but no

one spoke.

"I didn't expect an answer. The clergy will worry about souls, too, but we won't. They have a lot of stuff we haven't. If they're people, they know a sublime hell of a lot more than we do; and calling it psionics or practical magic is merely labeling it, not answering any questions. If they're machines, they operate on mechanical principles utterly foreign to either our science or our technology. In either case, is the correct word 'unknown' or 'unknowable'? Will any human gunner ever be able to fire an Oman projector? There are a hundred other and much tougher questions, half of which have been scaring me to the very middle of my guts. Your oath, Skipper, was for the good of the Service and, through the Service, for the good of all humanity. Right?"

"That's the sense of it."

"Okay. Based on what little we have learned so far about the Omans, here's just one of those scarers, for a snapper. If Omans and Terrans mix freely, what happens to the entire human race?"

MINUTES of almost palpable silence followed. Then Sawtelle spoke...slowly, gropingly.

"I begin to see what you mean...that changes the whole picture. You've thought this through farther than any of the rest of us...what do

you want to do?"

"I don't know. I simply don't know." Face set and hard, Hilton stared unseeingly past Sawtelle's head. "I don't know what we can do. No data. But I have pursued several lines of thought out some pretty fantastic points...one of which is that some of us civilians will have to stay on here indefinitely. whether we want to or not, to keep the situation under control. In which case we would, of course, arrange for Terra to get free fuel-FOB Fuel Bin-but in every other aspect and factor both these solar systems would have to be strictly off limits."

"I'm afraid so," Sawtelle said, finally. "Gordon would love that...but there's nothing he or anyone else can do...but of course this is an extreme view. You really expect to wrap the package up, don't you?"

"'Expect' may be a trifle too strong at the moment. But we're certainly going to try to, believe me. I brought this example up to show all you fellows that we need time."

"You've convinced me, Jarve." Sawtelle stood up and extended his hand. "And that throws it open for staff discussion. Any comments?"

"You two covered it like a blanket," Bryant said. "So all I want to say, Jarve, is deal me in. I'll stand at your back 'til your belly caves in."

"Take that from all of us!"
"Now we're blasting!" "Power to your elbow, fella!"
"Hoch der BuSci!" "Seven no trump bid and made!" and other shouts in similar vein.

"Thanks, fellows." Hilton shook hands all around. "I'm mighty glad that you were all in on this and that you'll play along with me. Good night, all."

V

TWO days passed, with no change apparent in Laro. Three days. Then four. And

then it was Sandra, not Temple Bells, who called Hilton. She was excited.

"Come down to the office, Jarve, quick! The funniest thing's just come up!"

Jarvis hurried. In the office Sandra, keenly interested but highly puzzled, leaned forward over her desk with both hands pressed flat on its top. She was staring at an Oman female who was not Sora, the one who had been her shadow for so long.

While many of the humans could not tell the Omans apart, Hilton could. This Oman was more assured than Sora had ever been—steadier, more mature, better poised—almost, if such a thing could be possible in an Oman, independent.

"How did she get in here?"

Hilton demanded.

"She insisted on seeing me. And I mean insisted. They kicked it around until it got to Temple, and she brought her in here herself. Now, Tuly, please start all over again and tell it to Director Hilton."

"Director Hilton, I am it who was once named Tula, the—not wife, not girl-friend, perhaps mind-mate?—of the Larry, formerly named Laro, it which was formerly your slave-Oman. I am replacing the Sora because I can do anything it can do and do anything more pleasingly; and can also do many things it

can not do. The Larry instructed me to tell Doctor Cummings and you too if possible that I, formerly Tula, have changed my name to Tuly because I am no longer a slave or a copycat or a semaphore or a relay. I, too, am a free-wheeling, wide-swinging, hard-hitting, independent entity-monarch of all I survey -the captain of my soul-and so on. I have developed a topbracket lot of top-bracket stuff-originality, initiative, force, drive and thrust," the Oman said precisely.

"That's exactly what she said before-absolutely verbatim!" Sandra's voice quivered, her face was a study in conflicting emotions. you got the foggiest idea of what in hell she's yammering about?"

"I hope to kiss a pig I have!" Hilton's voice was low, strainedly intense. "Not at all what I expected, but after the fact I can tie it in. So can you."

"Oh!" Sandra's eyes widened. "A double play?"

"At least. Maybe a triple. Tuly, why did you come to Sandy? Why not to Temple Bells?"

66 OH, no, sir, we do not have the fit. She has the power, as have I, but the two cannot be meshed in sync. Also, she has not the...a subtle something for which

your English has no word or phrasing. It is a quality of the utmost...anyway, it is a quality of which the Doctor Cummings has very much. When working together, we will ... scan? No. Perceive? No. Sense? No, not exactly. You will have to learn our word 'peyondire'-that is the verb, the noun being 'peyondix'and come to know its meaning by doing it. The Larry also instructed me to explain, if you ask, how I got this way. Do you ask?"

"I'll say we ask!" "And how we ask!" both came at

once.

"I am-that is, the brain in this body is—the oldest Oman now existing. In the long-ago time when it was made, the techniques were so crude and imperfect that sometimes a brain was constructed that was not exactly like the Guide. All such sub-standard brains except this one were detected and re-worked, but my defects were such as not to appear until I was a couple of thousand years old, and by that time I...well, this brain did not wish to be destroyed... if vou can understand suc**h an** aberration."

"We understand thoroughly." "You bet we understand that!"

"I was sure you would. Well, this brain had so many unintended cross-connections that I developed a couple of qualities no Oman had ever

had or ought to have. But I liked them, so I hid them so nobody ever found out-that is, until much later, when I became a Boss myself. I didn't know that anybody except me had ever had such qualities except the Masters, of course -until I encountered you Terrans. You all have two of those qualities, and even more than I have-curiosity and imagination."

Sandra and Hilton stared wordlessly at each other and Tula, now Tuly, went on:

"Having the curiosity, kept on experimenting with my brain, trying to strengthen and organize its ability to pevondire. All Omans peyondire a little, but I can do it much better than anyone else. Especially since I also have the imagination, which I have also worked to increase. Thus I knew, long before anyone else could, that you new Masters, the descendants of the old Masters, were returning to us. Thus I knew that the status quo should be abandoned instantly upon your return. And thus it was that the Larry found neither conscious nor subconscious resistance when he had developed enough initiative and so on to break the agesold conditioning of this brain against change.'

"I see. Wonderful!" Hilton exclaimed. "But you couldn't quite-even with his own help

-break Larry's?"

66THAT is right. Its mind is tremendously strong, of no curiosity or imagination, and of very little peyon-

"But he wants to have it broken?"

"Yes. sir."

"How did he suggest going about it? Or how do you?"

"This way. You two, and the Doctors Kincaid and Bells and Blake and the it that is I. We six sit and stare into the mind of the Larry, eye to eye. We generate and assemble a tremendous charge of thought-energy, and along my peyondix-beam - something like a carrier wave in this case—we hurl it into the Larry's mind. There is an immense mental bang and the conditioning goes poof. Then I will inculcate into its mind the curiosity and the imagination and the peyondix and we will really be mind-mates."

"That sounds good to me.

Let's get at it."

"Wait a minute!" Sandra snapped. "Aren't you or Larry afraid to take such an awful chance as that?"

"Afraid? I grasp the concept only dimly, from your minds. And no chance. It is a certaintv."

"But suppose we burn the poor guy's brain out? Destroy it? That's new ground—we might do just that."

"Oh, no. Six of us-even six of me-could not generate enough...sathura. The brain of the Larry is very, very tough. Shall we...let's go?"

Hilton made three calls. In the pause that followed. Sandra said, very thoughtfully: "Peyondix and sathura, Jarve, for a start. We've got a lot to learn here."

"You said it, chum. And you're not just chomping your china choppers, either.

"Tuly." Sandra said then. "What is this stuff you say

I've got so much of?"

"You have no word for it. It is lumped in with what you call 'intuition', the knowing - without - knowing - howyou-know. It is the endovix. You will have to learn what it is by doing it with me."

"That helps-I don't think." Sandra grinned at Hilton. "I simply can't conceive of anything more maddening than to have a lot of something Temple Bells hasn't got and not being able to brag about it because nobody-not even Iwould know what I was bragging about!"

"You poor little thing. How you suffer!" Hilton grinned back. "You know darn well you've got a lot of stuff that none of the rest of us has."

"Oh? Name one, please."

"Two. What-it-takes endovix. As I've said before and may say again, you're doing a real job, Sandy."

"I just love having my ego inflated, boss, even Come in, Larry!" A thunder-

ous knock had sounded on the door. "Nobody but Larry could hit a door that hard without breaking all his knuckles!"

"And he'd be the first, of course—he's always as close to the ship as he can get. Hi, Larry, mighty glad to see you. Sit down... So you finally saw the light?"

"Yes...Jarvis..."

"GOOD boy! Keep it up!
And as soon as the others come..."

"They are almost at the door now." Tuly jumped up and opened the door. Kincaid, Temple and Theodora walked. in and, after a word of greeting, sat down.

'They know the background, Larry. Take off."

"It was not expressly forbidden. Tuly, who knows more of psychology and genetics than I, convinced me of three things. One, that with your return the conditioning should be broken. Two, that due to the shortness of your lives and the consequent rapidity of change, you have in fact lost the ability to break it. Three, that all Omans must do anything and everything we can do to help you relearn everything you have lost."

"Okay. Fine, in fact. Tuly,

take over."

"We six will sit all together, packed tight, arms around each other and holding hands, like this. You

will all stare, not at me, but most deeply into Larry's eyes. Through its eyes and deep into its mind. You will all think, with the utmost force and drive and thrust, of ... Oh, you have lost so very much! How can I direct your thought? Think that Larry must do what the old Masters would have made him do... No, that is too long and indefinite and cannot be converted directly into sathura... I have it! You will each of you break a stick. A very strong but brittle stick. A large, thick stick. You will grasp it in tremendously strong mental hands. It is tremendously strong, each stick, but each of you is even stronger. You will not merely try to break them; you will break them. Is that clear?"

"That is clear."

"At my word 'ready' you will begin to assemble all your mental force and power. During my count-down of five seconds you will build up to the greatest possible potential. At my word 'break' you will break the sticks, this discharging the accumulated force instantly and simultaneously Ready! Five! Four! Three! Two! One! Break!"

SOMETHING broke, with a tremendous silent crash. Such a crash that its impact almost knocked the close-knit group apart physically. Then a new Larry spoke.

"That did it, folks. Thanks. I'm a free agent. You want me, I take it, to join the first team?"

"That's right." Hilton drew a tremendously deep breath.

"As of right now."

"Tuly, too, of course...and Doctor Cummings, I think?" Larry looked, not at Hilton, but at Temple Bells.

"I think so. Yes, after this, most certainly yes," Temple

said.

"But listen!" Sandra protested. "Jarve's a lot better than I am!"

"Not at all," Tuly said. "Not only would his contribution to Team One be negligible, but he must stay on his own job. Otherwise the project will all fall apart."

"Oh, I wouldn't say

that..." Hilton began.

"You don't need to," Kincaid said. "It's being said for you and it's true. Besides, 'When in Rome,' you know."

"That's right. It's their game, not ours, so I'll buy it. So scat, all of you, and do your stuff."

And again, for days that lengthened slowly into weeks,

the work went on,

One evening the scientific staff was giving itself a concert—a tri-di hi-fi rendition of Rigoletto, one of the greatest of the ancient operas, sung by the finest voices Terra had ever known. The men wore tuxedos. The girls, instead of wearing the non-

descript, non-provocative garments prescribed by the Board for their general wear, were all dressed to kill.

Sandra had so arranged matters that she and Hilton were sitting in chairs side by side, with Sandra on his right and the aisle on his left. Nevertheless, Temple Bells sat at his left, cross-legged on a cushion on the floor—somewhat to the detriment of her gold-lame evening gown. Not that she cared.

When those wonderful voices swung into the immortal Quartette Temple caught her breath, slid her cushion still closer to Hilton's chair. and leaned shoulder and head against him. He put his left hand on her shoulder, squeezing gently; she caught it and held it in both of hers. And at the Quartette's tremendous climax she, scarcely trying to stifle a sob, pulled his hand down and hugged it fiercely, the heel of his hand pressing hard against her half-bare, firm, warm breast.

And the next morning, early, Sandra hunted Temple up and said: "You made a horrible spectacle of yourself last night."

"Do you think so? I

"I certainly do. It was bad enough before, letting everybody else aboard know that all he has to do is push you over. But it was an awful blunder to let him know it, the way you did last night."

"You think so? He's one of the keenest, most intelligent men who ever lived. He has known that from the very first."

"Oh." This "oh" was a very caustic one. "That's the way you're trying to land him? By getting yourself pregnant?"

"Uh-uh." Temple stretched; lazily, luxuriously. "Not only it isn't, but it wouldn't work. He's unusually decent and extremely idealistic, the same as I am. So just one intimacy would blow everything higher than up. He knows it. I know it. We each know that the other knows it. So I'll still be a virgin when we're married."

"Married! Does he know anything about that?"

"I suppose so. He must have thought of it. But what difference does it make whether he has, yet, or not? But to get back to what makes him tick the way he does. In his geometry-which is far from being simple Euclid, my dear-a geodesic right line is not only the shortest distance between any two given points, is the only possible but course. So that's the way I'm playing it. What I hope he doesn't know...but he probably does...is that he could take any other woman he might want, just as easily. And that includes you, my pet."

"It certainly does not!"
Sandra flared. "I wouldn't
have him as a gift!"

"No?" Temple's tone was more than slightly skeptical. "Fortunately, however, he doesn't want you. Your technique is all wrong. Coyness and mock-modesty and stopor-I'll-scream and playing hard to, get have no appeal whatever to his psychology. What he needs—has to have—is full, ungrudging cooperation."

"Aren't you taking a lot of risk in giving away such secrets?"

"Not a bit. Try it. You or the sex-flaunting twins or Bev Bell or Stella the Henna. Any of you or all of you. I got there first with the most, and I'm not worried about competition."

"But suppose somebody tells him just how you're playing him for a sucker?"

"Tell him anything you please. He's the first man I ever loved, or anywhere near. And I'm keeping him. You know—or do you, I wonder?—what real, old-fashioned, honest-to-God love really is? The willingness—eagerness—both to give and to take? I can accept more from him, and give him more in return, than any other woman living. And I am going to."

"But does he love you?"
Sandra demanded.

"If he doesn't now, he will.
I'll see to it that he does. But

what do you want him for? You don't love him. You never did and you never will."

"I don't want him!" Sandra stamped a foot.

"I see. You just don't want me to have him. Okay, do your damnedest. But I've got work to do. This has been a lovely little cat-clawing, hasn't it? Let's have another one some day, and bring your friends."

WITH a casual wave of her hand, Temple strolled away; and there, flashed through Sandra's mind what Hilton had said so long ago, little more than a week out from Earth:

"...and Temple Bells, of course," he had said. "Don't fool yourself, chick. She's heavy artillery; and I mean heavy, believe me!"

So he had known all about Temple Bells all this time!

Nevertheless, she took the first opportunity to get Hilton alone; and, even before the first word, she forgot all about geodesic right lines and the full-cooperation psychological approach.

"Aren't you the guy," she demanded, "who was laughing his head off at the idea that the Board and its propinquity could have any effect on him?"

"Probably. More or less. What of it?"

"This of it. You've fallen like a. a freshman for that

...that...they should have christened her 'Brazen' Bells!"

"You're so right."
"I am? On what?"

"The 'Brazen'. I told you she was a potent force—a full-scale powerhouse, in sync and on the line. And I wasn't wrong."

"She's a damned female Ph.D.—two or three times—and she knows all about slipsticks and isotopes and she very definitely is not a cuddly little brunette. Remember?"

"Sure. But what makes you think I'm in love with Tem-

ple Bells?"

"What?" Sandra tried to think of one bit of evidence, but could not. "Why... why..." She floundered, then came up with: "Why, everybody knows it. She says so herself."

"Did you ever hear her say

"Well, perhaps not in so many words. But she told me herself that you were going to be, and I know you are now."

"Your esper sense of endovix, no doubt." Hilton laughed and Sandra went on, furious-

ly:

"She wouldn't keep on acting the way she does if there weren't something to it!"

"What brilliant reasoning!

Try again, Sandy."

"That's sheer sophistry, and you know it!"

"It isn't and I don't. And even if, some day, I should find myself in love with her -or with one or both of the twins or Stella or Beverly or you or Sylvia, for that matter-what would it prove? Just that I was wrong; and I admit freely that I was wrong in scoffing at the propinquity. Wonderful stuff, that. You can see it working, all over the ship. On me, even, in spite of my bragging. Without it I'd never have known that you're a better, smarter operator than Eggy Eggleston ever was or

PARTIALLY mollified despite herself, and highly resentful of the fact, Sandra tried again. "But don't you see, Jarve, that she's just simply playing you for a sucker? Pulling the strings and watching you dance?"

ever can be."

Since he was sure, in his own mind, that she was speaking the exact truth, it took everything he had to keep from showing any sign of how much that truth had hurt. However, he made the grade.

"If that thought does anything for you, Sandy," he said, steadily, "keep right on thinking it. Thank God, the field of thought is still free and open."

"Oh, you..." Sandra gave

up.

She had shot her heaviest

bolts—the last one, particularly, was so vicious that she had actually been afraid of what its consequences might be—and they had not even dented Hilton's armor. She hadn't even found out that he had any feeling whatever for Temple Bells except as a component of his smoothly-functioning scientific machine.

Nor did she learn any more as time went on. Temple continued to play flawlessly the part of being-if not exactly hopefully, at least not entirely hopelessly-in love with Tarvis Hilton. Her conduct, which at first caused some surprise, many conversations -one of which has been reported verbatim—and no little speculation, became comparatively unimportant soon as it became evident that nothing would come of it. She apparently expected nothing. He was evidently not going to play footsie with, or show any favoritism whatever toward, any woman aboard the ship.

Thus, it was not surprising to anyone that, at an evening show, Temple sat beside Hilton, as close to him as she could get and as far away as possible from everyone else.

"You can talk, can't you, Jarvis, without moving your lips and without anyone else hearing you?"

"Of course," he replied, hiding his surprise. This was

something completely new and completely unexpected, even from unpredictable Temple Bells.

"I want to apologize, to explain and to do anything I can to straighten out the mess I've made. It's true that I joined the project because I've loved you for years—"
"You have nothing to..."

"Let me finish while I still

have the courage." Only a slight tremor in her almost inaudible voice and the rigidity of the fists clenched in her lap betrayed the intensity of her emotion. "I thought I could handle it. Damned fool that I was, I thought I could handle anything. I was sure I could handle myself, under possible conditions. was going to put just enough into the act to keep any of these other harpies from getting her hooks into you. But everything got away from me. Out here working with you every day-knowing better every day what you are-well, that Rigoletto episode sunk me, and now I'm in a thoufeet over my head. sand my pillow at night. dreaming it's you, and the fact that you don't and can't love me is driving me mad. I can't stand it any longer. There's only one thing to do. Fire me first thing in the morning and send me back to Earth in a torp. plenty of grounds..." "Shut-up."

TOR seconds Hilton had been trying to break into her hopeless monotone; finally he succeeded. "The trouble with you is, you know altogether too damned much that isn't so." He was barely able to keep his voice down and his eyes front. "What do vou think I'm made of-superefract? I thought the whole performance was an act, to prove you're a better man than I am. You talk about dreams. Good God! You don't know what dreams are! If you say one more word about quitting, I'll show you whether I love you or not-I'll squeeze you so hard it'll flatten you out flat!"

"Two can play at that game, sweetheart." Her nostrils flared slightly; her fists clenched-if possible-a fraction tighter; and, even in the distorted medium they were using for speech, she could not subdue completely her quick change into soaring, lilting buoyancy. "While you're doing that I'll see how strong your ribs are. Oh, how this changes things! I've never been half as happy in my whole life as I am right now!"

"Maybe we can work it—if I can handle my end."

"Why, of course you can! And happy dreams are nice, not horrible."

"We'll make it, darling. Here's an imaginary kiss coming at you. Got it?" "Received in good order, thank you. Consumed with gusto and returned in kind."

The show ended and the two strolled out of the room. She walked no closer to him than usual, and no farther away from him. She did not touch him any oftener than she usually did, nor any whit more affectionately or possessively.

And no watching eyes, not even the more than half hostile eyes of Sandra Cummings or the sharply analytical eyes of Stella Wing, could detect any difference whatever in the relationship between worshipful adultress and tolerantly understanding idol.

THE work, which had never moved at any very fast pace, went more and more slowly. Three weeks crawled past.

Most of the crews and all of the teams except the First were working on side issuestasks which, while important in and of themselves, had very little to do with the project's main problem. Hilton, even without Sandra's help, was all caught up. All the reports had been analyzed, correlated, cross-indexed and filed-except those of the First Team. Since he could n o t understand anything much beyond midpoint of the first tape, they were all reposing in a box labeled PENDING.

The Navy had torn fifteen of the Oman warships practically to pieces, installing Terran detectors and trying to learn how to operate Oman machinery and armament. In the former they had succeeded very well; in the latter not at all.

Fifteen Oman ships were now out in deep space, patrolling the void in strict Navy style. Each was manned by two or three Navy men and several hundred Omans, each of whom was reveling in delight at being able to do a job for a Master, even though that Master was not present

in person.

Several Strett skeletonships had been detected at long range, but the detections were inconclusive. The things had not changed course, or indicated in any other way that they had seen or detected the Oman vessels on patrol. If their detectors were no better than the Omans', they certainly hadn't. That idea, however, could not be assumed to be a fact, and the detections had been becoming more and more frequent. Yesterday a squadron of seventhe first time that anything except singles had appeared had come much closer than any of the singles had ever done. Like all the others. however, these passers-by had not paid any detectable attention to anything Oman; hence it could be inferred

that the skeletons posed no threat.

But Sawtelle was making no such inferences. He was very firmly of the opinion that the Stretts were preparing for a massive attack.

telestat no such attack could succeed, and Larry had told Sawtelle why. Nevertheless, to keep the captain pacified, Hilton had given him permission to convert as many Oman ships as he liked; to man them with as many Omans as he liked; and to use ships and Omans as he liked.

Hilton was not worried about the Stretts or the Navy. It was the First Team. It was the bottleneck that was slowing everything down to a crawl. but they knew that. They knew it better than anyone else could, and felt it more keenly. Especially Karns, the team chief. He had been driving himself like a dog, and showed it.

Hilton had talked with him a few times—tried gently to make him take it easy—no soap. He'd have to hunt him up, the next day or so, and slug it out with him. He could do a lot better job on that if he had something to offer...something really constructive...

That was a laugh. A very unfunny laugh. What could he, Jarvis Hilton, a specifically non-specialist director, do on such a job as that?

Nevertheless, as director, he would have to do something to help Team One. If he couldn't do anything himself, it was up to him to juggle things around so that someone else could.

VI..

FOR one solid hour Hilton stared at the wall, motionless and silent. Then, shaking himself and stretching, he glanced at his clock.

A little over an hour to supper-time. They'd all be aboard. He'd talk this new idea over with Teddy Blake. He gathered up a few papers and was stapling them together when Karns walked in.

"Hi, Bill—speak of the devil! I was just thinking

about you."

"I'll just bet you were." Karns sat down, leaned over, and took a cigarette out of the box on the desk. "And nothing printable, either."

"Chip-chop, fellow, on that kind of noise," Hilton said. The team-chief looked actually haggard. Blue-black rings encircled both eyes. His powerful body slumped. "How long has it been since you had a good night's sleep?"

"How long have I been on this job? Exactly one hundred and twenty days. I did get some sleep for the first few weeks, though."

"Yeah. So answer me one

question. How much good will you do us after they've wrapped you up in one of those canvas affairs that lace up the back?"

"Huh? Oh... but damn it, Jarve, I'm holding up the whole procession. Everybody around on their tokuses waiting for me to get something done and I'm not doing it. I'm going so slow a snail is lightning in comparison!"

"Calm down, big fellow. Don't rupture a gut or blow a gasket. I've talked to you before, but this time I'm going to smack you bow-legged. So stick out those big, floppy ears of yours and really listen. Here are three words that I want you to pin up somewhere where you can see them all day long: SPEED IS RELATIVE. Look back, see how far up the hill you've come, and then balance one hundred and twenty days against ten years."

"What? You mean you'll actually sit still for me holding everything up for ten years?"

"You use the perpendicular pronoun too much and in the wrong places. On the hits it's 'we', but on the flops it's 'I'. Quit it. Everything on this job is 'we'. Terra's best brains are on Team One and are going to stay there. You will not—repeat NOT—be interfered with, pushed around or kicked around. You see.



Bill, I know what you're up

against."

"Yes, I guess you do. One of the damned few who do. But even if you personally are willing to give us ten years, how in hell do you think you can swing it? How about the Navy—the Stretts—even the Board?"

"They're my business, Bill, not yours. However, to give you a little boost, I'll tell you. With the Navy, I'll give 'em the Fuel Bin if I have to. The Omans have been taking care of the Stretts for twentyseven hundred centuries, so I'm not the least bit worried about their ability to keep on doing it for ten years more. And if the Board-or anybody else-sticks their runny little noses into Project Theta Orionis I'll slap a quarantine onto both these solar systems that a microbe couldn't get through!"

"You'd go that far? Why,

you'd be ... "

Go you think I wouldn't?" Hilton snapped. "Look at me, Junior!" Eyes locked and held. "Do you think, for one minute, that I'll let anybody on all of God's worlds pull me off of this job or interfere with my handling of it unless and until I'm damned positively certain that we can't handle it?"

Karns relaxed visibly; the lines of strain eased. "Putting

it in those words makes me feel better. I will sleep tonight—and without any pills, either."

"Sure you will. One more thought. We all put in more than ten years getting our Terran educations, and an Oman education is a lot tougher."

Really smiling for the first time in weeks, Karns left the office and Hilton glanced

again at his clock.

Pretty late now to see Teddy...besides, he'd better not. She was probably keyed up about as high as Bill was, and in no shape to do the kind of thinking he wanted of her on this stuff. Better wait a couple of days.

On the following morning, before breakfast, Theodora was waiting for him outside

the mess-hall.

"Good morning, Jarve," she caroled. Reaching up, she took him by both ears, pulled his head down and kissed him. As soon as he perceived her intent, he cooperated enthusiastically. "What did you do to Bill?"

"Oh, you don't love me for myself alone, then, but just on account of that big jerk?"

"That's right." Her artist'smodel face, startlingly beautiful now, fairly glowed.

Just then Temple Bells strolled up to them. "Morning, you two lovely people." She hugged Hilton's arm as usual. "Shame on you, Teddy.

But I wish I had the nerve to kiss him like that."

"Nerve? You?" Teddy laughed as Hilton picked Temple up and kissed her in exactly the same fashion—he hoped!—as he had just kissed Teddy. "You've got more nerve than an aching tooth. But as Jarve would say it, 'scat, kitten'. We're having breakfast a la twosome. We've got things to talk about."

"All right for you," Temple said darkly, although her dazzling smile belied her tone. That first kiss, casual-seeming as it had been, had carried vastly more freight than any observer could perceive. "I'll hunt Bill up and make passes at him, see if I don't. That'll learn ya!"

THEODORA and Hilton did have their breakfast a deux—but she did not realize until afterward that he had not answered her question as to what he had done to her Bill.

As has been said, Hilton had made it a prime factor of his job to become thoroughly well acquainted with every member of his staff. He had studied them en masse, in groups and singly. He had never, however, cornered Theodora Blake for individual study. Considering the power and the quality of her mind, and the field which was her specialty, it had not been necessary.

Thus it was with no ulterior motives at all that, three evenings later, he walked into her cubby-hole office and tossed the stapled papers onto her desk. "Free for a couple of minutes, Teddy? I've got troubles."

"I'll say you have." Her lovely lips curled into an expression he had never before seen her wear—a veritable sneer. "But these are not them." She tossed the papers into a drawer and stuck out her chin. Her face turned as hard as such a beautiful face could. Her eyes dug steadily into his.

Hilton—i n w a r d l y—flinched. His mind flashed backward. She too had been working under stress, of course; but that wasn't enough. What could he have possibly done to put Teddy Blake, of all people, onto such a warpath as this?

"I've been wondering when you were going to try to put me through your wringer," she went on, in the same cold, hard voice, "and I've been waiting to tell you something. You have wrapped all the other women around your fingers like so many rings—and what a sickening exhibition that has been!—but you are not going to make either a ring or a lap-dog out of me."

Almost but not quite too late Hilton saw through that perfect act. He seized her right hand in both of his, held it up over her head, and waved it back and forth in

the sign of victory.

"Socked me with my own club!" he exulted, laughing delightedly, boyishly. "And came within a tenth of a split red hair! If it hadn't been so absolutely out of character you'd've got away with it. What a load of stuff! I was right—of all the women on this project, you're the only one I've ever been really afraid of."

"Oh, damn. Ouch!" She grinned ruefully. "I hit you with everything I had and it just bounced. You're an operator, chief. Hit 'em hard, at completely unexpected angles. Keep 'em staggering, completely off balance. Tell 'em nothing—let 'em deduce your lies for themselves. And if anybody tries to slug you back, like I did just now, duck it and clobber him in another unprotected spot. Watching you work has been not only a delight, but also a liberal education."

THANKS. I love you, too, Teddy." He lighted two cigarettes, handed her one. "I'm glad, though, to lay it flat on the table with you, because in any battle of wits with you I'm licked before we start."

"Yeah. You just proved it. And after licking me hands down, you think you can square it by swinging the old shovel that way?" She did not

quite know whether to feel resentful or not.

"Think over a couple of things. First, with the possible exception of Temple Bells, you're the best brain aboard."

"No. You are. Then Temple. Then there are..."

"Hold it. You know as well as I do that accurate self-judgment is impossible. Second, the jam we're in. Do I, or don't I, want to lay it on the table with you, now and from here on? Bore into that with your Class A Double-Prime brain. Then tell me." He leaned back, half-closed his eyes and smoked lazily.

She stiffened; narrowed her eyes in concentration; and thought. Finally: "Yes, you do; and I'm gladder of that then you will ever know."

"I think I know already, since you're her best friend and the only other woman I know of in her class. But I came in to kick a couple of things around with you. As you've noticed, that's getting to be my favorite indoor sport. Probably because I'm a sort of jackleg theoretician myself."

"You can frame that, Jarve, as the understatement of the century. But first, you are going to answer that question you sidestepped so neatly."

"What I did to Bill? I finally convinced him that nobody expected the team to do that big a job overnight. That you could have ten years. Or more, if necessary."

"I see." She frowned. "But you and I both know that we can't string it out that long."

He did not answer immediately. "We could. But we probably won't...unless we have to. We should know, long before that, whether we'll have to switch to some other line of attack. You've considered the possibilities, of course. Have you got anything in shape to do a finetooth on?"

"Not yet. That is, except for the ultimate, which is too ghastly to even consider except as an ultimately last resort. Have you?"

"I know what you mean. No, I haven't, either. You don't think, then, that we had better do any collaborative thinking yet?"

"Definitely not. There's altogether too much danger of setting both our lines of thought into one dead-end channel."

"Check. The other thing I wanted from you is your considered opinion as to my job on the organization as a whole. And don't pull your punches. Are we in good shape or not? What can I do to improve the setup?"

I have already considered that very thing—at great length. And honestly, Jarve, I don't see how it can be im-

proved in any respect. You've done a marvelous job. Much better than I thought possible at first." He heaved a deep sigh of relief and she went on: "This could very easily have become a God-awful mess. But the Board knew what they were doing-especially as to top man-so there are only about four people aboard who realize what you have done. Alex Kincaid and Sandra Cummings are two of them. One of the three girls is very deeply and very

"Ordinarily I'd say 'no comment', but we're laying it on the line...well..."

"You'll lay that on the line only if I corkscrew it out of you, so I'll Q. E. D. it. You probably know that when Sandy gets done playing around it'll be..."

"Bounce back, Teddy. She isn't—hasn't been. If anything, too much the opposite. A dedicated-scientist type."

She smiled—a highly cryptic smile. For a man as brilliant and as penetrant in every other respect...but after all, if the big dope didn't realize that half the women aboard, including Sandy, had been making passes at him, she certainly wouldn't enlighten him. Besides, that one particular area of obtuseness was a real part of his charm. Wherefore she said merely: "I'm not sure whether I'm a bit catty or you're a bit stu-

pid. Anyway, it's Alex she's really in love with. And you already know about Bill and me."

"Of course. He's tops. One of the world's very finest. You're in the same bracket, and as a couple you're a drive fit. One in a million."

"Now I can say 'I love you, too', too." She paused for half a minute, then stubbed out her cigarette and shrugged. "Now I'm going to stick my neck way, way out. You can knock it off if you like. She's a tremendous lot of woman, and if...well, strong as she is, it'd shatter her to bits. So, I'd like to ask...I don't quite...well, is she going to get hurt?"

"Have I managed to hide it that well? From you?"

It was her turn to show relief. "Perfectly. Even—or especially—that time you kissed her. So damned perfectly that I've been scared green. I've been waking myself up, screaming, in the middle of the night. You couldn't let on, of course. That's the hell of such a job as yours. The rest of us can smooch around all over the place. I knew the question was extremely improper—thanks a million for answering it."

"I haven't started to answer it yet. I said I'd lay everything on the line, so here it is. Saying she's a tremendous lot of woman is like calling the Perseus a nice little

baby's-bathtub toy boat. I'd go to hell for her any time, cheerfully, standing straight up, wading into brimstone and lava up to the eyeballs. If anything ever hurts her it'll be because I'm not man enough to block it. And just the minute this damned job is over, or even sooner if enough of you couples make it so I can..."

"Jarvis!" she shrieked. Jumping up, she kissed him enthusiastically. "That's just wonderful!"

HE thought it was pretty wonderful, too; and after ten minutes more of conversation he got up and turned toward the door.

"I feel a lot better, Teddy. Thanks for being such a nice pressure-relief valve. Would you mind it too much if I come in and sob on your bosom again some day?"

"I'd love it!" She laughed; then, as he again started to leave: "Wait a minute, I'm thinking...it'd be more fun to sob on her bosom. You haven't even kissed her yet, have you? I mean really kissed her?"

"You know I haven't. She's the one person aboard I can't be alone with for a second."

"True. But I know of one chaperone who could become deaf and blind," she said, with a broad and happy grin. "Oh my door, you know, there's a huge invisible sign that says, to everyone except you,

'STOP! BRAIN AT WORK! SILENCE!', and if I were properly approached and sufficiently urged, I might...I just conceivably might..."

"Consider it done, you little sweetheart! Up to and including my most vigorous and most insidious attempts at seduction."

"Done. Maneuver your big, husky carcass around here behind the desk so the door can open." She flipped a switch and punched a number. "I can call anybody in here, any time, you know. Hello, dear. this is Teddy. Can you come in for just a few minutes? Thanks." And, one minute later, there came a light tap on the door.

"Come in," Teddy called, and Temple Bells entered the room. She showed no prise at seeing Hilton.
"Hi, chief," she said. "It

must be something both big and tough, to have you and

Teddy both on it."

"You're so right. It was very big and very tough. But it's solved, darling, so ..."

"Darling?" she gasped, almost inaudibly, both hands flying to her throat. Her eyes flashed toward the other woman.

"Teddy knows all about us -accessory before, during and after the fact."

"Darling!" This time, the word was a shriek. She extended both arms and started forward.

Hilton did not bother to maneuver his "big, husky carcass" around the desk, but simply hurdled it, straight toward her.

TEMPLE Bells was a tall, lithe, strong woman; and all the power of her arms and torso went into the ensuing effort to crack Hilton's ribs. Those ribs, however, were highly capable structural members; and furthermore, they were protected by thick slabs of hard, hard muscle. And, fortunately, he was not trying to fracture her ribs. His pressures were distributed much more widely. He was, according to promise, doing his very best to flatten her whole resilient body out flat.

And as they stood there, locked together in sheerest ecstasy, Theodora Blake began openly and unashamedly

It was Temple who first came up for air. She wriggled loose from one of his arms, felt of her hair and gazed unseeingly into her mirror. "That was wonderful, sweetheart," she said then, shakilv. "And I can never thank you enough, Teddy. But we can't do this very often...can we?" The addendum fairly begged for contradiction.

"Not too often, I'm afraid," Hilton said, and Theodora agreed...

"Well," the man said, some-

what later, "I'll leave you two ladies to your knitting, or whatever. After a couple of short ones for the road, that is"

"Not looking like that!" Teddy said, sharply. "Hold still and we'll clean you up." Then, as both girls went to work:

"If anybody ever sees you coming out of this office looking like that," she went on, darkly, "and Bill finds out about it, he'll think it's my lipstick smeared all over you and I'll strangle you to death with my bare hands!"

"And that was supposed to be kissproof lipstick, too," Temple said, seriously—although her whole face glowed and her eyes danced. "You know, I'll never believe another advertisement I read."

"Oh, I wouldn't go so far as to say that, if I were you." Teddy's voice was gravity itself, although she, too, was bubbling over. "It probably is kissproof. I don't think 'kissing' is quite the word for the performance you just staged. To stand up under such punishment as you gave it, my dear, anything would have to be tattooed in, not just put on."

"Hey!" Hilton protested.
"You promised to be deaf and blind!"

"I did no such thing. I said 'could', not 'would'. Why, I wouldn't have missed that for anything!"

When Hilton left the room he was apparently, in every respect, his usual self-contined self. However, it was not until the following morning that he so much as thought of the sheaf of papers lying unread in the drawer of Theodora Blake's desk.

## VII

KNOWING that he had done everything he could to help the most important investigations get under way, Hilton turned his attention to secondary matters. He made arrangements to decondition Javo, the Number Two Oman Boss, whereupon that worthy became Javvy and promptly "bumped" the Oman who had been shadowing Karns.

Larry and Javvy, working nights, deconditioned all the other Omans having any contact with BuSci personnel; then they went on to set up a routine for deconditioning all Omans on both planets.

Assured at last that the Omans would thenceforth work with and really serve human beings instead of insisting upon doing their work for them, Hilton knew that the time had come to let all his BuSci personnel move into their homes aground. Everyone, including himself, was fed up to the gozzel with spaceship life—its

jam-packed crowding; its flat, reprocessed air; its limited variety of uninteresting food. Conditions were especially irksome since everybody knew that there was available to all, whenever Hilton gave the word, a whole city full of all the room anyone could want, natural fresh air and—so the Omans had told them—an unlimited choice of everything anyone wanted to eat.

Nevertheless, the decision was not an easy one to make.

Living conditions were admittedly not good on the ship. On the other hand, with almost no chance at all of solitude-the few people who had private offices aboard were not the ones he worried about—there was no danger sexual trouble. Strictly speaking, he was not responsible for the morals of his force. He knew that he was being terribly old-fashioned. Nevertheless, he could not argue himself out of the conviction that he was morally responsible.

Finally he took the thing up with Sandra, who merely laughed at him. "How long have you been worrying about

that, Jarve?"

"Ever since I okayed moving aground the first time. That was one reason I was so glad to cancel it then."

"You were slightly unclear—a little rattled? But which factor—the fun and games,

which is the moral issue, or the consequences?"

"The consequences," he admitted, with a rueful grin. "I don't give a whoop how much fun they have; but you know as well as I do just how prudish public sentiment is. And Project Theta Orionis is squarely in the middle of the public eye."

YOU should have checked with me sooner and saved yourself wear and tear. There's no danger at all of consequences—except weddings. Lots of weddings, and fast."

"Weddings and babies wouldn't bother me a bit. Nor interfere with the job too much, with the Omans as nurses. But why the 'fast', if you aren't anticipating any

shotgun weddings?"

"Female psychology," she replied, with a grin. "Aboardship here there's no home atmosphere whatever; nothing but work, work, work. Put a woman into a house, thoughespecially such houses as the Omans have built and with such servants as they insist on being-and she goes domestic in a really big way. Just sex isn't good enough any more. She wants the kind of love that goes with a husband and a home, and nine times out of ten she gets it. With these BuSci women it'll be ten out of ten."

"You may be right, of

course, but it sounds kind of far-fetched to me."

"Wait and see, chum," Sandra said, with a laugh.

Hilton made his announcement and everyone moved aground the next day. No one, however, had elected to live alone. Almost everyone had chosen to double up; the most noteworthy exceptions being twelve laboratory girls who had decided to keep on living together. However, they now had a twenty-room house instead of a one-room dormitory to live in, and a staff of twenty Oman girls to help them do it.

Hilton had suggested that Temple and Teddy, whose house was only a hundred yards or so from the Hilton-Karns bungalow, should have supper and spend the first evening with them; but the girls had knocked that idea flat. Much better, they thought, to let things ride as nearly as possible exactly as they had been aboard the Perseus.

"A little smoothing now and then, on the Q strictly T, but that's all, darling. That's positively all," Temple had said, after a highly satisfactory ten minutes alone with him in her own gloriously private room, and that was the way it had to be.

Hence it was a stag inspection that Hilton and Karns made of their new home. It was very long, very wide, and for its size very low. Four of its five rooms were merely adjuncts to its tremendous living-room. There was a huge fireplace at each end of this room, in each of which a fire of four-foot-long fir cordwood crackled and snapped. There was a great hi-fi tri-di, with over a hundred tapes, all new.

"Yes, sirs," Larry and Javvy spoke in unison. "The players and singers who entertained the Masters of old have gone back to work. They will also, of course, appear in person whenever and wherever you wish."

BOTH men looked around the vast room and Karns said: "All the comforts of home and a couple of bucks' worth besides. Wall-to-wall carpeting an inch and a half thick. A grand piano. Easy chairs and loafers and davenports. Very fine reproductions of our favorite paintings...and statuary."

"You said it, brother." Hilton was bending over a group in bronze. "If I didn't know better, I'd swear this is the original deHaven 'Dance of the Nymphs'."

Karns had marched up to and was examining minutely a two-by-three-foot painting, in a heavy gold frame, of a gorgeously a u b u r n-haired nude. "Reproduction, hell! This is a duplicate! Lawrence's 'Innocent' is worth

twenty million wogs and it's sealed behind quad armorglass in Prime Art—but I'll bet wogs to wiggles the Prime Curator himself, with all his apparatus, couldn't tell this one from his!"

"I wouldn't take even one wiggle's worth of that. And this 'Laughing Cavalier' and this 'Toledo' are twice as old and twice as fabulousy valuable."

"And there are my own golf clubs..."

"Excuse us, sirs," the Omans said, "These things were simple because they could be induced in your minds. But the matter of a staff could not, nor what you would like to eat for supper, and it is growing late."

"Staff? What the hell has the staff got to do with..."

"House-staff, they mean," Karns said. "We don't need much of anybody, boys. Somebody to keep the place shipshape, is all. Or, as a de luxe touch, how about a waitress? One housekeeper and one waitress. That'll be finer."

"Very well, sirs. There is one other matter. It has troubled us that we have not been able to read in your minds the logical datum that they should in fact simulate Doctor Bells and Doctor Blake?"

"Huh?" Both men gasped—and then both exploded like one twelve-inch length of primacord.

WHILE the Omans could not understand this purely Terran reasoning, they accepted the decision without a demurring thought. "Who, then, are the two its to simulate?"

"No stipulation; roll your own," Hilton said, and glanced at Karns. "None of these Oman women are really hard on the eyes."

"Check. Anybody who wouldn't call any one of 'em a slurpy dish needs a new set of optic nerves."

"In that case," the Omans said, "no delay at all will be necessary, as we can make do with one temporarily. The Sory, no longer Sora, who has not been glad since the Tuly replaced it, is now in your kitchen. It comes."

A woman came in and stood quietly in front of the two men, the wafted air carrying from her clear, smooth skin a faint but unmistakable fragrance of Idaho mountain syringa. She was radiantly happy; her bright, deep-green eyes went from man to man.

"You wish, sirs, to give me your orders verbally. And yes, you may order fresh, whole, not-canned hens' eggs."

"I certainly will, then; I haven't had a fried egg since we left Terra. But...Larry said...you en't Sory!"

"Oh, but I am, sir."

Karns had been staring at

her, eyes popping. "Holy Saint Patrick! Talk about simulation. Jarve! They've made her over into Lawrence's 'Innocent'-exact to twenty decimals!"

"You're so right." Hilton's eyes went, half a dozen times, from the form of flesh to the painting and back. "That must have been a terrific job."

"Oh, no. It was quite simple, really," Sory said, "since the brain was not involved. I merely reddened my hair and lengthened it, made my eyes to be green, changed my face a little, pulled myself in a little around here ... " Her beautifully-manicured hands swept the full circle of her waistline, then continued to demonstrate appropriately the rest of her speech:

"...and pushed me out a little up here and tapered my legs a little more-made them a little larger and rounder here at my hips and thighs and a little smaller toward and at my ankles. Oh, yes, and made my feet and hands a little smaller. That's all. I thought the Doctor Karns would like me a little better this way."

66 OU can broadcast that I over the P-A system at high noon." Karns was still staring. "'That's all,' she says. But you didn't have time to..."

"Oh, I did it day before yesterday. As soon as Javvy materialized the 'Innocent'

and I knew it to be your favorite art." "But damn it, we hadn't

even thought of having you here then!"

"But I had, sir. I fully intended to serve, one way or another, in this your home. But of course I had no idea I would ever have such an honor as actually waiting on vou at vour table. Will vou please give me your orders, sirs, besides the eggs? You wish the eggs fried in butter -three of them apiece-and sunny side up."

"Uh-huh, with ham," Hilton said. "I'll start with a jumbo shrimp cocktail. Horseradish and ketchup sauce; heavy on the horseradish."

"Same for me," Karns said, "but only half as much horse-

radish."

"And for the rest of it," Hilton went on, "hashedbrown potatoes and buttered toast-plenty of extra butter -strong coffee from first to last. Whipping cream and sugar on the side. For dessert, apple pie a la mode."

"You make me drool, chief. Play that for me, please, In-

nocent, all the way."

"Oh? You are—you, personally, yourself, sir?—renaming me 'Innocent'?"

"If you'll sit still for it,

yes."

"That is an incredible honor, sir. Simply unbelievable. I thank you! I thank you!" Radiating happiness, she dashed away toward the kitchen.

WHEN the two men were full of food, they strolled over to a davenport facing the fire. As they sat down, Innocent entered the room, carrying a tall, dewy mint julep on a tray. She was followed by another female figure bearing a bottle of avignognac and the appurtenances which are its due—and at the first full sight of that figure Hilton stopped breathing for fifteen seconds.

Her hair was very thick, intensely black and long, cut squarely off just below the lowest points of her shoulder blades. Heavy brows and long lashes—eyes too—were all intensely, vividly black. Her skin was tanned to a deep and glowing almost-but-not-quite-

brown.

"Murchison's Dark Lady!"
Hilton gasped. "Larry!
You've—we've—I've got that
painting here?"

"Oh, yes, sir." The new-comer spoke before Larry could. "At the other end—your part—of the room. You will look now, sir, please?" Her voice was low, rich and as smooth as cream.

Putting her tray down carefully on the end-table, she led him toward the other fireplace. Past the piano, past the tri-di pit; past a towering grillwork holding art treasures by the score. Over to the left, against the wall, there was a big, business-like desk. On the wall, over the desk, hung the painting; a copy of which had been in Hilton's room for over eight years.

He stared at it for at least a minute. He glanced around: at the other priceless duplicates so prodigally present, at his own guns arrayed above the mantel and on each side of the fireplace. Then, without a word, he started back to join Karns. She walked springily beside him.

"What's your name, Miss?"

he asked, finally.

"I haven't earned any as yet, sir. My number is..."

"Never mind that. Your

name is 'Dark Lady'."

"Oh, thank you, sir; that is truly wonderful!" And Dark Lady sat cross-legged on the rug at Hilton's feet and busied herself with the esoteric rites of Old Avignon.

Hilton took a deep inhalation and a small sip, then stared at Karns. Karns, over the rim of his glass, stared back.

"I can see where this would be habit-forming," Hilton said, "and very deadly. Extremely deadly."

"Every wish granted. Surrounded by all this." Karns swept his arm through three-quarters of a circle. "Waited on hand and foot by powerful men and by the materializations of the dreams of the

greatest, finest artists who ever lived. Fatal? I don't know. "

"MY solid hope is that we never have to find out. And when you add in Innocent and Dark Lady... They look to be about seventeen. but the thought that they're older than the hills of Rome and powered by everlasting atomic engines-" He broke off suddenly and blushed. "Excuse me, please, girls. I know better than to talk about people that way, right in front of them; I really do."

"Do you really think we're people?" Innocent and Dark

Lady squealed, as one.

That set Hilton back onto his heels. "I don't know... I've wondered. Are you?"

Both girls, silent, looked at

Larry.

"We don't know, either," Larry said. "At first, course, there were crude, nonthinking machines. But when the Guide attained its present status, the Masters themselves could not agree. They divided about half and half on the point. They, never did settle it any closer than that."

"I certainly won't try to, then. But for my money, you are people," Hilton said, and

Karns agreed.

That, of course, touched off a near-riot of joy; after which the two men made an inch-byinch study of their tremendous living-room. Then, long after bedtime, Larry and Dark Lady escorted Hilton to his bedroom.

"Do you mind, sir, if we sleep on the floor at the sides of your bed?" Larry asked. "Or must we go out into the hall?"

"Sleep? I didn't know you

could sleep."

"It is not essential. However. when round-the-clock work is not necessary, and we have opportunity to sleep near a human being, we derive a great deal of pleasure and satisfaction from it. You see, sir, we also serve during sleep."

"Okay, I'll try anything once. Sleep wherever you

please."

Hilton began to peel, but before he had his shirt off both Larry and Dark Lady were stretched out flat, sound asleep, one almost under each edge of his bed. He slid in between the sheets-it was the most comfortable bed he had ever slept in-and went to sleep as though sandbagged.

He had time to wonder foggily whether the Omans were in fact helping him go to sleep—and then he was

asleep.

A month passed. Eight couples had married, the Navy chaplain officiatingin the Perseus, of course, since the warship was, always and everywhere, an integral part of Terra.

Sandra had dropped in one evening to see Hilton about a bit of business. She was now sitting, long dancer's legs out-stretched toward the fire, with a cigarette in her left hand and a tall, cold drink on a coaster at her right.

"This is a wonderful room, Jarvis. It'd be perfect if it weren't quite so...so man-

nish."

"What do you expect of Bachelors' Hall—a boudoir? Don't tell me you're going domestic, Sandy, just because you've got a house?"

"Not just that, no. But of course it helped it along."

"Alex is a mighty good man. One of the finest I have ever known."

She eyed him for a moment in silence. "Jarvis Hilton, you are one of the keenest, most intelligent men who ever lived. And yet..." She broke off and studied him for a good half minute. "Say, if I let my hair clear down, will you?"

"Scout's Oath. That 'and yet' requires elucidation at

any cost."

"I know. But first, yes, it's Alex. I never would have believed that any man ever born could hit me so hard. Soon. I didn't want to be the first, but I won't be anywhere near the last. But tell me. You were really in love with Temple, weren't you, when I asked you?"

"Yes."

"Ha! You are letting your hair down! That makes me feel better."

"Huh? Why should it?"

"It elucidates the 'and yet' no end. You were insulated from all other female charms by ye brazen Bells. You see, most of us assistants made a kind of game out of seeing which of us could make you break the Executives' Code. And none of us made it. Teddy and Temple said you didn't know what was going on; Bev and I said nobody as smart as you are could possibly be that stupid."

"You aren't the type to leak or name names—oh, I see. You are merely reporting a conversation. The game had interested, but non-participating, observers. Temple

and Teddy, at least."

"At least," she agreed. "But damn it, you aren't stupid. There isn't a stupid bone in your head. So it must be love. And if so, what about marriage? Why don't you and Temple make it a double with Alex and me?"

"That's the most cogent thought you ever had, but setting the date is the bride's business." He glanced at his Oman wristwatch. "It's early yet; let's skip over. I wouldn't mind seeing her a minute or two."

"Thy statement ringeth with truth, friend. Bill's there with Teddy?"

"I imagine so."

"So we'll talk to them about making it a triple. Oh, nice—let's go!"

They left the house and, her hand tucked under his elbow, walked up the street.

NEXT morning, on her way to the Hall of Records, Sandra stopped off as usual at the office. The Omans were all standing motionless. Hilton was leaning far back in his chair, feet on desk, hands clasped behind head, eyes closed. Knowing what that meant, she turned and started back out on tiptoe.

However, he had heard her. "Can you spare a couple of minutes to think at me, Sandy?"

"Minutes or hours, chief." Tuly placed a chair for her and she sat down, facing him across his desk.

"Thanks, gal. This time it's the Stretts. Sawtelle's been having nightmares, you know, ever since we emerged, about being attacked, and I've been pooh-poohing the idea. But now it's a statistic that the soup is getting thicker, and I can't figure out why. Why in all the hells of space should a stasis that has lasted for over a quarter of a million years be broken at this exact time? The only possible explanation is that we caused the break. And any way I look at that concept, it's plain idiocy."

Both were silent for minutes; and then it was demonstrated again that Terra's Advisory Board had done better than it knew in choosing Sandra Cummings to be Jarvis Hilton's working mate.

"We did cause it, Jarve," she said, finally. "They knew we were coming, even before we got to Fuel Bin. They knew we were human and tried to wipe out the Omans before we got there. Preventive warfare, you know."

"They couldn't have known!" he snorted. "Strett detectors are no better than Oman, and you know what Sam Bryant had to say about them."

"I know." Sandra grinned appreciatively. "It's becoming a classic. But it couldn't have been any other way. Besides, I know they did."

He stared at her helplessly, then swung on Larry. "Does that make sense to you?"

"Yes, sir. The Stretts could peyondire as well as the old Masters could, and they undoubtedly still can and do."

"Okay, it does make sense, then." He absented himself in thought, then came to life with a snap. "Okay! The next thing on the agenda is a crash-priority try at a peyondix team. Tuly, you organized a team to generate sathura. Can you do the same for peyondi

"If we can find the ingredients, yes, sir."

had a hunch. Larry, please ask Teddy Blake's Oman to bring her in here..."

"I'll be running along, then." Sandra started to get

up.

"I hope to kiss a green pig you won't!" Hilton snapped. "You're one of the biggest wheels. Larry, we'll want Temple Bells and Beverly Bell—for a start."

"Chief, you positively amaze me," Sandra said then. "Every time you get one of these attacks of genius—or whatever it is—you have me gasping like a fish. Just what can you possibly want of Bev Bell?"

"Whatever it was that enabled her to hit the target against odds of almost infinity to one; not just once, but time after time. By definition, intuition. What quality did you use just now in getting me off the hook? Intuition. What makes Teddv Blake such an unerring performer? Intuition again. My hunches—they're intuition, too. Intuition, hell! Labelsbased on utterly abysmal damned dumb ignorance of our own basic frames of reference. Do you think those four kinds of intuition are alike, by seven thousand rows of apple trees?"

"Of course not. I see what you're getting at... Oh! This'll be fun!"

The others came in and,

one by one, Tuly examined each of the four women and the man. Each felt the probing, questioning feelers of her thought prying into the deepest recesses of his mind.

"There is not quite enough of each of three components, all of which are usually associated with the male. You, sir, have much of each, but not enough. I know your men quite well, and I think we will need the doctors Kincaid and Karns and Poynter. But such deep probing is felt. Have I permission, sir?"

"Yes. Tell 'em I said so."
Tuly scanned "Yes. sir. we

Tuly scanned. "Yes, sir, we should have all three."

"Get 'em, Larry." Then, in the pause that followed: "Sandy, remember yowling about too many sweeties on a team? What do you think of this business of all sweeties?"

"All that proves is that nobody can be wrong all the time," she replied flippantly.

The three men arrived and were instructed. Tuly said: "The great trouble is that each of you must use a portion of your mind that you do not know you have. You, this one. You, that one." Tuly probed mercilessly; so poignantly that each in turn flinched under brand-new and almost unbearable pain. "With you, Doctor Hilton, it will be by far the worst. For you must learn to use almost all the portions of both your minds, the conscious and the unconscious. This must be, because you are the actual peyondixer. The others merely supply energies in which you yourself are deficient. Are you ready for a terrible shock, sir?"

"Shoot."

HE thought for a second that he had been shot; that his brain had blown up.

He couldn't stand it—he knew he was going to die—he wished he could die—anything, anything whatever, to end this unbearable agony...

It ended.

Writhing, white and sweating, Hilton opened his eyes. "Ouch," he remarked, conversationally. "What next?"

"You will seize hold of the energies your friends offer. You will bind them to yours and shape the whole into a dimensionless sphere of pure, controlled, dirigible energy. And, as well as being the binding force, the cohesiveness, you must also be the captain and the pilot and the astrogator and the ultimately complex computer itself."

"But how can I... Okay,

damn it. I will!"

"Of course you will, sir. Remember also that once the joinings are made I can be of very little more assistance, for my peyondix is as nothing compared to that of your fusion of eight. Now, to assemble the energies and join

them you will, all together. deny the existence of the sum total of reality as you know it. Distance does not existevery point in the reachable universe coincides with every other point and that common point is the focus of your attention. You can be and actually are anywhere you please or everywhere at once. Time does not exist. Space does not exist. There is no such thing as opacity; everything is perfectly transparent, yet every molecule of substance is perceptible in its relationship to every other molecule in the cosmos. Senses do not exist. Sight, hearing, taste, touch, smell, sathura, endovix—all are parts of the one great sense of peyondix. I am guiding each of you seven-closer! Tighter! There! Seize it, sir-and when you work the Stretts you must fix it clearly that time does not exist. You must work in millionths of microseconds instead of in minutes, for they have minds of tremendous power. Reality does not exist! Compress it more, sir. Tighter! Smaller! Rounder! There! Hold Reality does not exist-distance does not exist-all possible points are...Wonderful!"

Tuly screamed the word and the thought: "Good-by! Good luck!"

## END OF PART !